

Appendix A

Values	<u>RILADDRESS Parameter Constants</u>
	RIL_PARAM_A_TYPE
	RIL_PARAM_A_NUMPLAN
	RIL_PARAM_A_ADDRESS
	RIL_PARAM_A_ALL
Comments	None

Values	<u>RILAUDIODEVICEINFO Parameter Constants</u>
	RIL_PARAM_ADI_TXDEVICE
	RIL_PARAM_ADI_RXDEVICE
	RIL_PARAM_ADI_ALL
Comments	None

Values	<u>RILBEARERSVCINFO Parameter Constants</u>
	RIL_PARAM_BSI_SPEED
	RIL_PARAM_BSI_SERVICENAME
	RIL_PARAM_BSI_CONNECTIONELEMENT
	RIL_PARAM_BSI_ALL
Comments	None

1. *How many people are there in your family?*
 2. *What is your family's income?*
 3. *What is your family's education level?*
 4. *What is your family's occupation?*
 5. *What is your family's religion?*
 6. *What is your family's culture?*
 7. *What is your family's values?*
 8. *What is your family's beliefs?*
 9. *What is your family's traditions?*
 10. *What is your family's customs?*
 11. *What is your family's language?*
 12. *What is your family's food?*
 13. *What is your family's clothing?*
 14. *What is your family's housing?*
 15. *What is your family's transportation?*
 16. *What is your family's entertainment?*
 17. *What is your family's health care?*
 18. *What is your family's social life?*
 19. *What is your family's political views?*
 20. *What is your family's environmental concerns?*
 21. *What is your family's technology use?*
 22. *What is your family's communication style?*
 23. *What is your family's conflict resolution style?*
 24. *What is your family's decision-making process?*
 25. *What is your family's problem-solving approach?*
 26. *What is your family's coping mechanism?*
 27. *What is your family's stress management?*
 28. *What is your family's emotional support?*
 29. *What is your family's physical support?*
 30. *What is your family's financial support?*
 31. *What is your family's educational support?*
 32. *What is your family's career support?*
 33. *What is your family's health support?*
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 93. *What is your family's financial support?*
 94. *What is your family's educational support?*
 95. *What is your family's career support?*
 96. *What is your family's health support?*
 97. *What is your family's social support?*
 98. *What is your family's emotional support?*
 99. *What is your family's physical support?*
 100. *What is your family's financial support?*

Comments	None
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Comments	None
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Comments	None
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RILCALLINFO Parameter Constants

Values	RIL_PARAM_CI_ID
	RIL_PARAM_CI_DIRECTION
	RIL_PARAM_CI_STATUS
	RIL_PARAM_CI_TYPE
	RIL_PARAM_CI_MULTIPARTY
	RIL_PARAM_CI_ADDRESS
	RIL_PARAM_CI_DESCRIPTION
	RIL_PARAM_CI_ALL

Comments	None
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RILCALLWAITINGINFO Parameter Constants

Values	RIL_PARAM_CWI_CALLTYPE
	RIL_PARAM_CWI_CALLERINFO
	RIL_PARAM_CWI_ADDRESSID
	RIL_PARAM_CWI_ALL

Comments	None
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RILCAPSBARRINGPWDLENGTH Parameter Constants

Values	RIL_PARAM_CBPL_TYPE
	RIL_PARAM_CBPL_PASSWORDLENGTH
	RIL_PARAM_CBPL_ALL

Comments	None
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RILCAPSBEARERSVC Parameter Constants

Values	RIL_PARAM_CBS_SPEEDS1
	RIL_PARAM_CBS_SPEEDS2
	RIL_PARAM_CBS_SERVICENAMES
	RIL_PARAM_CBS_CONNECTIONELEMENTS
	RIL_PARAM_CBS_ALL
Comments	None

RILCAPSDIAL Parameter Constants

Values	RIL_PARAM_CD_CALLTYPES
	RIL_PARAM_CD_OPTIONS
	RIL_PARAM_CD_ALL
Comments	None

RILCAPSGPRS Parameter Constants

Values	RIL_PARAM_CGPRS_CLASS
	RIL_PARAM_CGPRS_MOSMSSERVICES
	RIL_PARAM_CGPRS_NUMGPRS_PROTOCOLCAPS
	RIL_PARAM_CGPRS_GPRS_PROTOCOLCAPS
	RIL_PARAM_CGPRS_ALL
Comments	None

RILCAPSHSCSD Parameter Constants

Values	RIL_PARAM_CHSCSD_MULTISLOTCLASS
	RIL_PARAM_CHSCSD_MAXRXTIMESLOTS
	RIL_PARAM_CHSCSD_MAXTXTIMESLOTS
	RIL_PARAM_CHSCSD_MAXTOTALTIMESLOTS
	RIL_PARAM_CHSCSD_CHANNELCODINGS
	RIL_PARAM_CHSCSD_AIRINTERFACEUSERRATES
	RIL_PARAM_CHSCSD_TOPRXTIMESLOTRANGE
	RIL_PARAM_CHSCSD_ALL
Comments	None

RILCAPSLOCKINGPWDLENGTH Parameter Constants

Values	RIL_PARAM_CLPL_FACILITY
	RIL_PARAM_CLPL_PASSWORDLENGTH
	RIL_PARAM_CLPL_ALL
Comments	None

RILCAPSMMSGMEMORYLOCATIONS Parameter Constants

Values	RIL_PARAM_CMML_READLOCATIONS
	RIL_PARAM_CMML_WRITELOCATIONS
	RIL_PARAM_CMML_STORELOCATIONS
	RIL_PARAM_CMML_ALL
Comments	None

Values

RIL_PARAM_CRLP_ALL

None

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RILCELLTOWERINFO Parameter Constants

Values	RIL_PARAM_CTI_MOBILECOUNTRYCODE
	RIL_PARAM_CTI_MOBILENETWORKCODE
	RIL_PARAM_CTI_LOCATIONAREACODE
	RIL_PARAM_CTI_CELLID
	RIL_PARAM_CTI_BASESTATIONID
	RIL_PARAM_CTI_BROADCASTCONTROLCHANNEL
	RIL_PARAM_CTI_RXLEVEL
	RIL_PARAM_CTI_RXLEVELFULL
	RIL_PARAM_CTI_RXLEVELSUB
	RIL_PARAM_CTI_RXQUALITY
	RIL_PARAM_CTI_RXQUALITYFULL
	RIL_PARAM_CTI_RXQUALITYSUB
	RIL_PARAM_CTI_IDLETIMESLOT
	RIL_PARAM_CTI_TIMINGADVANCE
	RIL_PARAM_CTI_GPRSCELLID
	RIL_PARAM_CTI_GPRSBASESTATIONID
	RIL_PARAM_CTI_ALL
Comments	None

RILCLOSEDGROUPSETTINGS Parameter Constants

Values **RIL_PARAM_CGS_STATUS**
RIL_PARAM_CGS_INDEX
RIL_PARAM_CGS_INFO
RIL_PARAM_CGS_ALL

Comments None

RILCONNECTINFO Parameter Constants

Values **RIL_PARAM_CNI_CALLTYPE**
RIL_PARAM_CNI_BAUDRATE
RIL_PARAM_CNI_ALL

Comments None

RILCOSTINFO Parameter Constants

Values **RIL_PARAM_CSTI_CCM**
RIL_PARAM_CSTI_ACM
RIL_PARAM_CSTI_MAXACM
RIL_PARAM_CSTI_COSTPERUNIT
RIL_PARAM_CSTI_CURRENCY
RIL_PARAM_CSTI_ALL

Comments None

RILDATACOMPINFO Parameter Constants

Values **RIL_PARAM_DCI_DIRECTION**
 RIL_PARAM_DCI_NEGOTIATION
 RIL_PARAM_DCI_MAXDICTENTRIES
 RIL_PARAM_DCI_MAXSTRING
 RIL_PARAM_DCI_ALL

Comments None

RILDIALEDIDSETTINGS Parameter Constants

Values **RIL_PARAM_DIDS_PROVISIONING**
 RIL_PARAM_DIDS_STATUS
 RIL_PARAM_DIDS_ALL

Comments None

RILDIALINFO Parameter Constants

Values **RIL_PARAM_DI_CMDID**
 RIL_PARAM_DI_CALLID
 RIL_PARAM_DI_ALL

Comments None

RILEQUIPMENTINFO Parameter Constants

Values **RIL_PARAM_EI_MANUFACTURER**
RIL_PARAM_EI_MODEL
RIL_PARAM_EI_REVISION
RIL_PARAM_EI_SERIALNUMBER
RIL_PARAM_EI_ALL

Comments None

RILEQUIPMENTSTATE Parameter Constants

Values **RIL_PARAM_EQUIPMENTSTATE_RADIOSUPPORT**
RIL_PARAM_EQUIPMENTSTATE_EQSTATE

Comments None

RILERRORCORRECTIONINFO Parameter Constants

Values **RIL_PARAM_ECI_ORIGINALREQUEST**
RIL_PARAM_ECI_ORIGINALFALLBACK
RIL_PARAM_ECI_ANSWERERFALLBACK
RIL_PARAM_ECI_ALL

Comments None

RILGAININFO Parameter Constants

Values **RIL_PARAM_GI_TXGAIN**
 RIL_PARAM_GI_RXGAIN
 RIL_PARAM_GI_ALL

Comments None

RILGPRSCONTEXT Parameter Constants

Values **RIL_PARAM_GCONT_CONTEXTID**
 RIL_PARAM_GCONT_PROTOCOLTYPE
 RIL_PARAM_GCONT_ACCESSPOINTNAME
 RIL_PARAM_GCONT_ADDRESS
 RIL_PARAM_GCONT_DATACOMPRESSION
 RIL_PARAM_GCONT_HEADERCOMPRESSION
 RIL_PARAM_GCONT_PARAMETERLENGTH
 RIL_PARAM_GCONT_PARAMETERS
 RIL_PARAM_GCONT_ALL

Comments None

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RILGPRSPROTOCOLCAPS Parameter Constants

Values	RIL_PARAM_GPC_PROTOCOLID
	RIL_PARAM_GPC_MINCONTEXTID
	RIL_PARAM_GPC_MAXCONTEXTID
	RIL_PARAM_GPC_DATACOMPRESSION
	RIL_PARAM_GPC_HEADERCOMPRESSION
	RIL_PARAM_GPC_PRECEDENCECLASS
	RIL_PARAM_GPC_DELAYCLASS
	RIL_PARAM_GPC_RELIABILITYCLASS
	RIL_PARAM_GPC_PEAKTHRUCLASS
	RIL_PARAM_GPC_MEANTHRUCLASS
	RIL_PARAM_GPC_PARAMETERLENGTH
	RIL_PARAM_GPC_PARAMETERS
	RIL_PARAM_GPC_ALL
Comments	None

RILGPRSQOSPROFILE Parameter Constants

Values **RIL_PARAM_QOSP_CONTEXTID**
RIL_PARAM_QOSP_PRECEDENCECLASS
RIL_PARAM_QOSP_DELAYCLASS
RIL_PARAM_QOSP_RELIABILITYCLASS
RIL_PARAM_QOSP_PEAKTHRUCLASS
RIL_PARAM_QOSP_MEANTHRUCLASS
RIL_PARAM_QOSP_ALL

Comments None

RILHIDECONNECTEDIDSETTINGS Parameter Constants

Values **RIL_PARAM_HCIDS_PROVISIONING**
RIL_PARAM_HCIDS_STATUS
RIL_PARAM_HCIDS_ALL

Comments None

RILHIDEIDSETTINGS Parameter Constants

Values **RIL_PARAM_HIDS_STATUS**
RIL_PARAM_HIDS_PROVISIONING
RIL_PARAM_HIDS_ALL

Comments None

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RILHSCSDINFO Parameter Constants

Values

RIL_PARAM_HSCSDI_TRANSPRXTIMESLOTS
RIL_PARAM_HSCSDI_TRANSPCHANNELCODINGS
RIL_PARAM_HSCSDI_NONTRANSPRXTIMESLOTS
RIL_PARAM_HSCSDI_NONTRANSPCHANNELCODINGS
RIL_PARAM_HSCSDI_AIRINTERFACEUSERRATE
RIL_PARAM_HSCSDI_RXTIMESLOTSLIMIT
RIL_PARAM_HSCSDI_AUTOSVCLEVELUPGRADING
RIL_PARAM_HSCSDI_ALL

Comments

None

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RIL_PARAM_M_SVCCTRADDRESS

RIL_PARAM_M_FLAGS

RIL_PARAM_M_TGTRECIPIADDRESS**RIL_PARAM_M_SCRECEIVETIME**

RIL PARAM M TGTDISCHARGETIME

RIL_PARAM_M_DATACODING

RIL_PARAM_M_TGTMSGREFERENCE

RIL_PARAM_M_VP

RIL_PARAM_M_GEOSCOPE

RIL_PARAM_M_MSGCODE

RIL_PARAM_M_UPDATENUMBER**RIL_PARAM_M_ID**

RIL_PARAM_M_TOTALPAGES

RIL_PARAM_M PAGENUMBER

RIL_PARAM_M_HDRLLENGTH

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RILMSGCONFIG Parameter Constants

Values	RIL_PARAM_MC_SVCCTRADDRESS
	RIL_PARAM_MC_BROADCASTMSGIDS
	RIL_PARAM_MC_BROADCASTMSGLANGS
	RIL_PARAM_MC_ALL
Comments	None

RILMSGDCS Parameter Constants

Values	RIL_PARAM_MDCS_TYPE
	RIL_PARAM_MDCS_FLAGS
	RIL_PARAM_MDCS_MSGCLASS
	RIL_PARAM_MDCS_ALPHABET
	RIL_PARAM_MDCS_INDICATION
	RIL_PARAM_MDCS_LANGUAGE
	RIL_PARAM_MDCS_ALL
Comments	None

RILMSGSERVICEINFO Parameter Constants

Values	RIL_PARAM_MSI_SERVICE
	RIL_PARAM_MSI_MSGCLASSES
	RIL_PARAM_MSI_READLOCATION
	RIL_PARAM_MSI_READUSED
	RIL_PARAM_MSI_READTOTAL
	RIL_PARAM_MSI_WRITELOCATION
	RIL_PARAM_MSI_WRITEUSED
	RIL_PARAM_MSI_WRITETOTAL
	RIL_PARAM_MSI_STORELOCATION
	RIL_PARAM_MSI_STOREUSED
	RIL_PARAM_MSI_STORETOTAL
	RIL_PARAM_MSI_ALL

Comments	None
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RILMSGSTORAGEINFO Parameter Constants

Values	RIL_PARAM_MSTI_READLOCATION
	RIL_PARAM_MSTI_WRITELOCATION
	RIL_PARAM_MSTI_STORELOCATION
	RIL_PARAM_MSTI_ALL

Comments	None
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RILOPERATORINFO Parameter Constants

Values **RIL_PARAM_OI_INDEX**
 RIL_PARAM_OI_STATUS
 RIL_PARAM_OI_NAMES
 RIL_PARAM_OI_ALL

Comments None

RILOPERATORNAMES Parameter Constants

Values **RIL_PARAM_ON_LONGNAME**
 RIL_PARAM_ON_SHORTNAME
 RIL_PARAM_ON_NUMNAME
 RIL_PARAM_ON_ALL

Comments None

RILPHONEBOOKENTRY Parameter Constants

Values **RIL_PARAM_PBE_INDEX**
 RIL_PARAM_PBE_ADDRESS
 RIL_PARAM_PBE_TEXT
 RIL_PARAM_PBE_ALL

Comments None

RILPHONEBOOKINFO Parameter Constants

Values **RIL_PARAM_PBI_STORELOCATION**
RIL_PARAM_PBI_USED
RIL_PARAM_PBI_TOTAL
RIL_PARAM_PBI_ALL

Comments None

RILREMOTEPARTYINFO Parameter Constants

Values **RIL_PARAM_RPI_ADDRESS**
RIL_PARAM_RPI_SUBADDRESS
RIL_PARAM_RPI_DESCRIPTION
RIL_PARAM_RPI_VALIDITY
RIL_PARAM_RPI_ALL

Comments None

RILRINGINFO Parameter Constants

Values **RIL_PARAM_RI_CALLTYPE**
RIL_PARAM_RI_SERVICEINFO
RIL_PARAM_RI_ADDRESSID
RIL_PARAM_RI_ALL

Comments None

RILRLPINFO Parameter Constants

Values	RIL_PARAM_RLPI_IWS
	RIL_PARAM_RLPI_MWS
	RIL_PARAM_RLPI_ACKTIMER
	RIL_PARAM_RLPI_RETRANSMISSIONATTEMPTS
	RIL_PARAM_RLPI_VERSION
	RIL_PARAM_RPLI_RESEQUENCINGPERIOD
	RIL_PARAM_RPLI_ALL
Comments	None

RILSERIALPORTSTATS Parameter Constants

Values	RIL_PARAM_SPS_READBITSPERSECOND
	RIL_PARAM_SPS_WRITTENBITSPERSECOND
	RIL_PARAM_SPS_ALL
Comments	None

RILSERVICEINFO Parameter Constants

Values	RIL_PARAM_SVCI_SYNCHRONOUS
	RIL_PARAM_SVCI_TRANSPARENT
	RIL_PARAM_SVCI_ALL
Comments	None

RILSIGNALQUALITY Parameter Constants

Values	RIL_PARAM_SQ_SIGNALSTRENGTH
	RIL_PARAM_SQ_MINSIGNALSTRENGTH
	RIL_PARAM_SQ_MAXSIGNALSTRENGTH
	RIL_PARAM_SQ_BITERRORRATE
	RIL_PARAM_SQ_LOWSIGNALSTRENGTH
	RIL_PARAM_SQ_HIGHSIGNALSTRENGTH
	RIL_PARAM_SQ_ALL
Comments	None

RILSIMCMDPARAMETERS Parameter Constants

Values	RIL_PARAM_SCP_FILEID
	RIL_PARAM_SCP_PARAM1
	RIL_PARAM_SCP_PARAM2
	RIL_PARAM_SCP_PARAM3
	RIL_PARAM_SCP_ALL
Comments	None

RILSIMRECORDSTATUS Parameter Constants

Values	RIL_PARAM_SRS_RECORDTYPE
	RIL_PARAM_SRS_ITEMCOUNT
	RIL_PARAM_SRS_SIZE
	RIL_PARAM_SRS_ALL
Comments	None

RILSIMRESPONSE Parameter Constants

Values	RIL_PARAM_SR_STATUSWORD1
	RIL_PARAM_SR_STATUSWORD2
	RIL_PARAM_SR_RESPONSE
	RIL_PARAM_SR_ALL
Comments	None

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RILSIMTOOLKITNOTIFYCAPS Parameter Constants

RILSUBADDRESS Parameter Constants

Values	RIL_PARAM_SA_TYPE
	RIL_PARAM_SA_SUBADDRESS
	RIL_PARAM_SA_ALL
Comments	None

RILSUBSCRIBERINFO Parameter Constants

Values	RIL_PARAM_SI_ADDRESS
	RIL_PARAM_SI_DESCRIPTION
	RIL_PARAM_SI_SPEED
	RIL_PARAM_SI_SERVICE
	RIL_PARAM_SI_ITC
	RIL_PARAM_SI_ADDRESSID
	RIL_PARAM_SI_ALL
Comments	None

RILSUPSERVICEDATA Parameter Constants

Values	RIL_PARAM_SSDI_STATUS
	RIL_PARAM_SSDI_DATA
Comments	None

Address Type Constants

Description Values	Different phone number representations
	RIL_ADDRTYPE_UNKNOWN <i>Unknown type</i>
	RIL_ADDRTYPE_INTERNATIONAL <i>International number</i>
	RIL_ADDRTYPE_NATIONAL <i>National number</i>
	RIL_ADDRTYPE_NETWORKSPECIFIC <i>Network specific number</i>
	RIL_ADDRTYPE_SUBSCRIBER <i>Subscriber number (protocol-specific)</i>
	RIL_ADDRTYPE_ALPHANUM <i>Alphanumeric address</i>
	RIL_ADDRTYPE_ABBREV <i>Abbreviated number</i>
Comments	None

API Result Constants

Description Values	API call results (RIL_NCLASS_FUNCRESULT)
	RIL_RESULT_OK <i>RIL API call succeeded; lpData is NULL</i>
	RIL_RESULT_NOCARRIER <i>RIL API failed because no carrier was detected; lpData is NULL</i>
	RIL_RESULT_ERROR <i>RIL API failed; lpData points to RIL_E_* constant</i>
	RIL_RESULT_NODIALTONE <i>RIL API failed because no dialtone was detected; lpData is NULL</i>
	RIL_RESULT_BUSY <i>RIL API failed because the line was busy; lpData is NULL</i>
	RIL_RESULT_NOANSWER <i>RIL API failed because of the lack of answer; lpData is NULL</i>
Comments	None

Audio Device Constants

Description	Audio devices
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Values	RIL_AUDIO_NONE <i>No audio devices</i>
	RIL_AUDIO_HANDSET <i>Handset</i>
	RIL_AUDIO_SPEAKERPHONE <i>Speakerphone</i>
	RIL_AUDIO_HEADSET <i>Headset</i>
	RIL_AUDIO_CARKIT <i>Carkit</i>
Comments	None

Bearer CE Constants

Description Values	Bearer service connection element capabilities
	RIL_CAPS_BSVCCCE_TRANSPARENT <i>TBD</i>
	RIL_CAPS_BSVCCCE_NONTRANSPARENT <i>TBD</i>
	RIL_CAPS_BSVCCCE_BOTH_TRANSPARENT <i>TBD</i>
	RIL_CAPS_BSVCCCE_BOTH_NONTRANSPARENT <i>TBD</i>
Comments	None

Bearer Service Constants

Description Values	Bearer service names
	RIL_BSVCCNAME_UNKNOWN <i>TBD</i>
	RIL_BSVCCNAME_DATACIRCUIT_ASYNC_UDI_MODEM <i>TBD</i>
	RIL_BSVCCNAME_DATACIRCUIT_SYNC_UDI_MODEM <i>TBD</i>
	RIL_BSVCCNAME_PADACCESS_ASYNC_UDI <i>TBD</i>
	RIL_BSVCCNAME_PACKETACCESS_SYNC_UDI <i>TBD</i>
	RIL_BSVCCNAME_DATACIRCUIT_ASYNC_RDI <i>TBD</i>

RIL_BSVNAME_DATACIRCUIT_SYNC_RDI
TBD

RIL_BSVNAME_PADACCESS_ASYNC_RDI
TBD

RIL_BSVNAME_PACKETACCESS_SYNC_RDI
TBD

Comments None

Bearer Service CE Constants

Description Bearer service connection elements
Values RIL_BSVCE_UNKNOWN
Bearer service unknown

RIL_BSVCE_TRANSPARENT
Link layer correction enabled

RIL_BSVCE_NONTRANSPARENT
No link layer correction present

RIL_BSVCE_BOTH_TRANSPARENT
Both available, transparent preferred

RIL_BSVCE_BOTH_NONTRANSPARENT
Both available, non-transparent preferred

Comments None

Bit Error Rate Constants

Description Special bit error rate value
Values RIL_BITERRORRATE_UNKNOWN
Unknown signal strength

Comments None

Call Barr Facility Constants

Description Types of call barring
Values RIL_BARRTYPE_ALLOUTGOING
Barr all outgoing calls

RIL_BARRTYPE_OUTGOINGINT
Barr outgoing international calls

RIL_BARRTYPE_OUTGOINGINTEXTHOME
Barr outgoing international calls except to home country

RIL_BARRTYPE_ALLINCOMING

Barr all incoming calls

RIL_BARRTYPE_INCOMINGROAMING

Barr incoming calls when roaming outside of home country

RIL_BARRTYPE_INCOMINGNOTINSIM

Barr incoming calls from numbers not stored to SIM memory

RIL_BARRTYPE_ALLBARRING

All barring services

RIL_BARRTYPE_ALLOUTGOINGBARRING

All outgoing barring services

RIL_BARRTYPE_ALLINCOMINGBARRING

All incoming barring services

Comments None

Call Barr Status Constants

**Description
Values**

Status values for call barring

RIL_BARRINGSTATUS_DISABLED

Disable

RIL_BARRINGSTATUS_ENABLED

Disable

Comments None

Call Direction Constants

**Description
Values**

Call direction

RIL_CALLDIR_INCOMING

Incoming call

RIL_CALLDIR_OUTGOING

Outgoing call

Comments None

Call Management Constants

**Description
Values**

Call management commands

RIL_CALLCMD_RELEASEHELD

Release all held calls, send "busy" to waiting call

RIL_CALLCMD_RELEASEACTIVE_ACCEPTHELD

Release all active calls, accept waiting/held call

RIL_CALLCMD_RELEASECALL*Release the specified call***RIL_CALLCMD_HOLDACTIVE_ACCEPTHELD***Hold all active calls, accept waiting/held call***RIL_CALLCMD_HOLDALLBUTONE***Hold all active calls, except for the specified call***RIL_CALLCMD_ADDHELDTOCONF***Add all held calls to a conference***RIL_CALLCMD_ADDHELDTOCONF_DISCONNECT***Connect held calls to a conference, disconnect the user***RIL_CALLCMD_INVOKECCBS***Invokes completion of calls to busy subscribers***Comments**

None

Call Multiparty Constants**Description
Values**

Call multiparty status values

RIL_CALL_SINGLEPARTY*Not in a conference***RIL_CALL_MULTIPARTY***Participating in a conference***Comments**

None

Call Option Constants**Description
Values**

Call options defaults

RIL_DIALTONEWAIT_DEFAULT*TBD***RIL_DIALTIMEOUT_DEFAULT***TBD***RIL_COMMAPAUSE_DEFAULT***TBD***RIL_DISCONNECTTIMEOUT_DEFAULT***TBD***Comments**

None

Call Status Constants**Description**

Call status values

Values	RIL_CALLSTAT_ACTIVE <i>Active call</i>
	RIL_CALLSTAT_ONHOLD <i>Call on hold</i>
	RIL_CALLSTAT_DIALING <i>In the process of dialing</i>
	RIL_CALLSTAT_ALERTING <i>In the process of ringing</i>
	RIL_CALLSTAT_INCOMING <i>Incoming (unanswered) call</i>
	RIL_CALLSTAT_WAITING <i>Incoming call waiting call</i>
Comments	None

Call Type Constants

Description Values	Call types
	RIL_CALLTYPE_UNKNOWN <i>Unknown</i>
	RIL_CALLTYPE_VOICE <i>Voice call</i>
	RIL_CALLTYPE_DATA <i>Data call</i>
	RIL_CALLTYPE_FAX <i>Fax call</i>
Comments	None

Caps Bearer Name Constants

Description Values	Bearer service name capabilities
	RIL_CAPS_BSVCSNAME_DATACIRCUIT_ASYNC_UDI_MODEM <i>TBD</i>
	RIL_CAPS_BSVCSNAME_DATACIRCUIT_SYNC_UDI_MODEM <i>TBD</i>
	RIL_CAPS_BSVCSNAME_PADACCESS_ASYNC_UDI <i>TBD</i>
	RIL_CAPS_BSVCSNAME_PACKETACCESS_SYNC_UDI <i>TBD</i>
	RIL_CAPS_BSVCSNAME_DATACIRCUIT_ASYNC_RDI <i>TBD</i>

RIL_CAPS_BSVCTYPE_DATACIRCUIT_SYNC_RDI
TBD

RIL_CAPS_BSVCTYPE_PADACCESS_ASYNC_RDI
TBD

RIL_CAPS_BSVCTYPE_PACKETACCESS_SYNC_RDI
TBD

Comments

None

Caps Bearer Speed1 Constants

Description
Values

Bearer service speed capabilities (first set)

RIL_CAPS_SPEED1_AUTO
TBD

RIL_CAPS_SPEED1_300_V21
TBD

RIL_CAPS_SPEED1_300_V110
TBD

RIL_CAPS_SPEED1_1200_V22
TBD

RIL_CAPS_SPEED1_1200_75_V23
TBD

RIL_CAPS_SPEED1_1200_V110
TBD

RIL_CAPS_SPEED1_1200_V120
TBD

RIL_CAPS_SPEED1_2400_V22BIS
TBD

RIL_CAPS_SPEED1_2400_V26TER
TBD

RIL_CAPS_SPEED1_2400_V110
TBD

RIL_CAPS_SPEED1_2400_V120
TBD

RIL_CAPS_SPEED1_4800_V32
TBD

RIL_CAPS_SPEED1_4800_V110
TBD

RIL_CAPS_SPEED1_4800_V120
TBD

RIL_CAPS_SPEED1_9600_V32
TBD

RIL_CAPS_SPEED1_9600_V34
TBD
 RIL_CAPS_SPEED1_9600_V110
TBD
 RIL_CAPS_SPEED1_9600_V120
TBD
 RIL_CAPS_SPEED1_14400_V34
TBD
 RIL_CAPS_SPEED1_14400_V110
TBD
 RIL_CAPS_SPEED1_14400_V120
TBD
 RIL_CAPS_SPEED1_19200_V34
TBD
 RIL_CAPS_SPEED1_19200_V110
TBD
 RIL_CAPS_SPEED1_19200_V120
TBD
 RIL_CAPS_SPEED1_28800_V34
TBD
 RIL_CAPS_SPEED1_28800_V110
TBD
 RIL_CAPS_SPEED1_28800_V120
TBD
 RIL_CAPS_SPEED1_38400_V110
TBD
 RIL_CAPS_SPEED1_38400_V120
TBD
 RIL_CAPS_SPEED1_48000_V110
TBD
 RIL_CAPS_SPEED1_48000_V120
TBD
 RIL_CAPS_SPEED1_56000_V110
TBD

Comments None

Caps Bearer Speed2 Constants

Description	Bearer service speed capabilities (second set)
Values	RIL_CAPS_SPEED2_56000_V120 <i>TBD</i>

RIL_CAPS_SPEED2_56000_TRANSP
TBD

RIL_CAPS_SPEED2_64000_TRANSP
TBD

Comments None

Caps Call Barr Constants

**Description
Values**

Call barring capabilities

RIL_CAPS_BARRTYPE_ALLOUTGOING
TBD

RIL_CAPS_BARRTYPE_OUTGOINGINT
TBD

RIL_CAPS_BARRTYPE_OUTGOINGINTEXTHOME
TBD

RIL_CAPS_BARRTYPE_ALLINCOMING
TBD

RIL_CAPS_BARRTYPE_INCOMINGROAMING
TBD

RIL_CAPS_BARRTYPE_INCOMINGNOTINSIM
TBD

RIL_CAPS_BARRTYPE_ALLBARRING
TBD

RIL_CAPS_BARRTYPE_ALLOUTGOINGBARRING
TBD

RIL_CAPS_BARRTYPE_ALLINCOMINGBARRING
TBD

Comments None

Caps Call Mgmt Constants

**Description
Values**

Call management command capabilities

RIL_CAPS_CALLCMD_RELEASEHELD
TBD

RIL_CAPS_CALLCMD_RELEASEACTIVE_ACCEPTHELD
TBD

RIL_CAPS_CALLCMD_RELEASECALL
TBD

RIL_CAPS_CALLCMD_HOLDACTIVE_ACCEPTHELD
TBD

RIL_CAPS_CALLCMD_HOLDALLBUTONE
TBD

RIL_CAPS_CALLCMD_ADDHELDTOCONF
TBD

RIL_CAPS_CALLCMD_ADDHELDTOCONF_DISCONNECT
TBD

RIL_CAPS_CALLCMD_INVOKECCBS
TBD

Comments None

Caps Call Type Constants

Description Call type capabilities
Values RIL_CAPS_CALLTYPE_VOICE
TBD

RIL_CAPS_CALLTYPE_DATA
TBD

RIL_CAPS_CALLTYPE_FAX
TBD

Comments None

Caps DCS Language Constants

Description Message broadcast data coding scheme language capabilities
Values RIL_DCSSLANG_GERMAN
TBD

RIL_DCSSLANG_ENGLISH
TBD

RIL_DCSSLANG_ITALIAN
TBD

RIL_DCSSLANG_FRENCH
TBD

RIL_DCSSLANG_SPANISH
TBD

RIL_DCSSLANG_DUTCH
TBD

RIL_DCSSLANG_SWEDISH
TBD

RIL_DCSSLANG_DANISH
TBD

RIL_DCSLANG_PORTUGUESE
TBD

RIL_DCSLANG_FINNISH
TBD

RIL_DCSLANG_NORWEGIAN
TBD

RIL_DCSLANG_GREEK
TBD

RIL_DCSLANG_TURKISH
TBD

RIL_DCSLANG_HUNGARIAN
TBD

RIL_DCSLANG_POLISH
TBD

RIL_DCSLANG_CZECH
TBD

Comments None

Caps Dialing Option Constants

Description Dialing options capabilities
Values RIL_CAPS_DIALOPT_RESTRICTID
TBD

RIL_CAPS_DIALOPT_PRESENTID
TBD

RIL_CAPS_DIALOPT_CLOSEDGROUP
TBD

Comments None

Caps Equipment Constants

Description Equipment state capabilities
Values RIL_CAPS_EQSTATE_MINIMUM
TBD

RIL_CAPS_EQSTATE_FULL
TBD

RIL_CAPS_EQSTATE_DISABLETX
TBD

RIL_CAPS_EQSTATE_DISABLERX
TBD

RIL_CAPS_EQSTATE_DISABLETXANDRX
TBD

Comments None

Caps Forwarding Constants

Description Forwarding reason capabilities
Values **RIL_CAPS_FWDREASON_UNCONDITIONAL**
TBD
RIL_CAPS_FWDREASON_MOBILEBUSY
TBD
RIL_CAPS_FWDREASON_NOREPLY
TBD
RIL_CAPS_FWDREASON_UNREACHABLE
TBD
RIL_CAPS_FWDREASON_ALLFORWARDING
TBD
RIL_CAPS_FWDREASON_ALLCONDITIONAL
TBD

Comments None

Caps HSCSD Air Interface Constants

Description HSCSD air interface user rate capabilities
Values **RIL_CAPS_HSCSDAIURATE_9600**
TBD
RIL_CAPS_HSCSDAIURATE_14400
TBD
RIL_CAPS_HSCSDAIURATE_19200
TBD
RIL_CAPS_HSCSDAIURATE_28800
TBD
RIL_CAPS_HSCSDAIURATE_38400
TBD
RIL_CAPS_HSCSDAIURATE_43200
TBD
RIL_CAPS_HSCSDAIURATE_57600
TBD

Comments None

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Caps HSCSD Traffic Channel Constants

Description	HSCSD traffic channel coding capabilities
Values	RIL_CAPS_HSCSDCODING_4800_FULLRATE <i>TBD</i> RIL_CAPS_HSCSDCODING_9600_FULLRATE <i>TBD</i> RIL_CAPS_HSCSDCODING_14400_FULLRATE <i>TBD</i>
Comments	None

Caps Info Class Constants

Description	Telephony information class capabilities
Values	RIL_CAPS_INFOCLASS_VOICE <i>TBD</i> RIL_CAPS_INFOCLASS_DATA <i>TBD</i> RIL_CAPS_INFOCLASS_FAX <i>TBD</i> RIL_CAPS_INFOCLASS_SMS <i>TBD</i> RIL_CAPS_INFOCLASS_DATACIRCUITSYNC <i>TBD</i> RIL_CAPS_INFOCLASS_DATACIRCUITASYNC <i>TBD</i> RIL_CAPS_INFOCLASS_PACKETACCESS <i>TBD</i> RIL_CAPS_INFOCLASS_PADACCESS <i>TBD</i>
Comments	None

Caps Message Service Constants

Description	Message service type capabilities
Values	RIL_CAPS_MSGSVCTYPE_PHASE2 <i>TBD</i> RIL_CAPS_MSGSVCTYPE_PHASE2PLUS <i>TBD</i>

Comments None

Caps Message Status Constants

Description Message status capabilities
Values **RIL_CAPS_MSGSTATUS_RECUNREAD**
 TBD
 RIL_CAPS_MSGSTATUS_RECREAD
 TBD
 RIL_CAPS_MSGSTATUS_STOUNSENT
 TBD
 RIL_CAPS_MSGSTATUS_STOSENT
 TBD

Comments None

Caps Message Storage Constants

Description Message storage location capabilities
Values **RIL_CAPS_MSGLOC_BROADCAST**
 TBD
 RIL_CAPS_MSGLOC_SIM
 TBD
 RIL_CAPS_MSGLOC_STATUSREPORT
 TBD

Comments None

Caps Phone Lock Constants

Description Locking facility capabilities
Values **RIL_CAPS_LOCKFACILITY_CNTRL**
 TBD
 RIL_CAPS_LOCKFACILITY_PH_SIM
 TBD
 RIL_CAPS_LOCKFACILITY_PH_FSIM
 TBD
 RIL_CAPS_LOCKFACILITY_SIM
 TBD
 RIL_CAPS_LOCKFACILITY_SIM_PIN2
 TBD

RIL_CAPS_LOCKFACILITY_SIM_FIXEDIALING
TBD
 RIL_CAPS_LOCKFACILITY_NETWORKPERS
TBD
 RIL_CAPS_LOCKFACILITY_NETWORKSUBPERS
TBD
 RIL_CAPS_LOCKFACILITY_SERVICEPROVPERS
TBD
 RIL_CAPS_LOCKFACILITY_CORPPERS
TBD

Comments None

Caps Phonebook Constants

Description Phonebook storage location capabilities
Values RIL_CAPS_PBLOC_SIMEMERGENCY
TBD
 RIL_CAPS_PBLOC_SIMFIXDIALING
TBD
 RIL_CAPS_PBLOC_SIMLASTDIALING
TBD
 RIL_CAPS_PBLOC_OWNNUMBERS
TBD
 RIL_CAPS_PBLOC_SIMPHONEBOOK
TBD

Comments None

Caps SIM Toolkit Constants

Description SIM Toolkit notification capabilities
Values RIL_CAPS_NOTIFY_SIMTOOLKITCMD
TBD
 RIL_CAPS_NOTIFY_SIMTOOLKITCALLSETUP
TBD
 RIL_CAPS_NOTIFY_SIMTOOLKITEVENT
TBD

Comments None

Caps Type Constants

**Description
Values**

Capability types.

RIL_CAPSTYPE_DIAL

TBD

RIL_CAPSTYPE_DTMFDURATIONRANGE

TBD

RIL_CAPSTYPE_CALLMGTCMDs

TBD

RIL_CAPSTYPE_BEARERSERVICE

TBD

RIL_CAPSTYPE_RLP

TBD

RIL_CAPSTYPE_EQUIPMENTSTATES

TBD

RIL_CAPSTYPE_PBSTORELOCATIONS

TBD

RIL_CAPSTYPE_PBINDEXRANGE

TBD

RIL_CAPSTYPE_PBENTRYTEXTLENGTH

TBD

RIL_CAPSTYPE_MSGSERVICETYPES

TBD

RIL_CAPSTYPE_MSGMEMORYLOCATIONS

TBD

RIL_CAPSTYPE_BROADCASTMSGLANGS

TBD

RIL_CAPSTYPE_MSGCONFIGINDEXRANGE

TBD

RIL_CAPSTYPE_MSGSTATUSVALUES

TBD

RIL_CAPSTYPE_PREFOPINDEXRANGE

TBD

RIL_CAPSTYPE_LOCKFACILITIES

TBD

RIL_CAPSTYPE_LOCKINGPWDLENGTHS

TBD

RIL_CAPSTYPE_BARRTYPES

TBD

RIL_CAPSTYPE_BARRINGPWDLENGTHS

TBD

RIL_CAPSTYPE_FORWARDINGREASONS
TBD

RIL_CAPSTYPE_INFOCLASSES
TBD

RIL_CAPSTYPE_HSCSD
TBD

RIL_CAPSTYPE_SIMTOOLKITNOTIFICATIONS
TBD

RIL_CAPSTYPE_GPRSCLASS
TBD

RIL_CAPSTYPE_GPRSCONTEXT
TBD

RIL_CAPSTYPE_GPRSQOS
TBD

RIL_CAPSTYPE_GPRSQOSMIN
TBD

RIL_CAPSTYPE_GPRSMOSMS
TBD

Comments None

Complete Call Busy Constants

Description Values Special value for all CCBS
RIL_CCBS_ALL
All CCBS

Comments None

CUG Info Level Constants

Description Values Closed User Group information levels
RIL_CUGINFO_NONE
TBD

RIL_CUGINFO_SUPPRESSOA
TBD

RIL_CUGINFO_SUPRESSPREF
TBD

RIL_CUGINFO_SUPPRESSOAANDPREF
TBD

Comments This feature is not used in Stinger and is untested.

CUG Special Constants

Description	Closed User Group special index value
Values	RIL_CUGINDEX_NONE <i>Used to identify the absence of CUG index</i>
Comments	None

Data Compression Constants

Description	Data compression directions
Values	RIL_DATACOMPDIR_NONE <i>No data compression</i> RIL_DATACOMPDIR_TRANSMIT <i>Data compression when sending</i> RIL_DATACOMPDIR_RECEIVE <i>Data compression when receiving</i> RIL_DATACOMPDIR_BOTH <i>Bi-directional data compression</i>
Comments	None

Data Compression Negotiation Constants

Description	Data compression negotiation options
Values	RIL_DATACOMP_OPTIONAL <i>Data compression optional</i> RIL_DATACOMP_REQUIRED <i>Terminal will disconnect if no negotiation</i>
Comments	None

Data Rate Constants

Description	Defines different protocol dependant data rates
Values	RIL_SPEED_UNKNOWN <i>Unknown speed</i> RIL_SPEED_AUTO <i>Automatic selection of speed</i> RIL_SPEED_300_V21 <i>300 bps (V.21)</i>

RIL_SPEED_300_V110
300 bps (V.100)

RIL_SPEED_1200_V22
1200 bps (V.22)

RIL_SPEED_1200_75_V23
1200/75 bps (V.23)

RIL_SPEED_1200_V110
1200 bps (V.100)

RIL_SPEED_1200_V120
1200 bps (V.120)

RIL_SPEED_2400_V22BIS
2400 bps (V.22bis)

RIL_SPEED_2400_V26TER
2400 bps (V.26ter)

RIL_SPEED_2400_V110
2400 bps (V.110 or X.31 flag stuffing)

RIL_SPEED_2400_V120
2400 bps (V.120)

RIL_SPEED_4800_V32
4800 bps (V.32)

RIL_SPEED_4800_V110
4800 bps (V.110 or X.31 flag stuffing)

RIL_SPEED_4800_V120
4800 bps (V.120)

RIL_SPEED_9600_V32
9600 bps (V.32)

RIL_SPEED_9600_V34
9600 bps (V.34)

RIL_SPEED_9600_V110
9600 bps (V.110 or X.31 flag stuffing)

RIL_SPEED_9600_V120
9600 bps (V.120)

RIL_SPEED_14400_V34
14400 bps (V.34)

RIL_SPEED_14400_V110
14400 bps (V.100 or X.31 flag stuffing)

RIL_SPEED_14400_V120
14400 bps (V.120)

RIL_SPEED_19200_V34
19200 bps (V.34)

RIL_SPEED_19200_V110
19200 bps (V.110 or X.31 flag stuffing)

RIL_SPEED_19200_V120
19200 bps (V.120)

RIL_SPEED_28800_V34
28800 bps (V.34)

RIL_SPEED_28800_V110
28800 bps (V.110 or X.31 flag stuffing)

RIL_SPEED_28800_V120
28800 bps (V.120)

RIL_SPEED_38400_V110
38400 bps (V.110 or X.31 flag stuffing)

RIL_SPEED_38400_V120
38400 bps (V.120)

RIL_SPEED_48000_V110
48000 bps (V.110 or X.31 flag stuffing)

RIL_SPEED_48000_V120
48000 bps (V.120)

RIL_SPEED_56000_V110
56000 bps (V.110 or X.31 flag stuffing)

RIL_SPEED_56000_V120
56000 bps (V.120)

RIL_SPEED_56000_TRANSP
56000 bps (bit transparent)

RIL_SPEED_64000_TRANSP
64000 bps (bit transparent)

Comments None

Dialing Option Constants

Description Dialing options

Values **RIL_DIALOPT_NONE**
No options

RIL_DIALOPT_RESTRICTID
Restrict CLI presentation

RIL_DIALOPT_PRESENTID
Allow CLI presentation

RIL_DIALOPT_CLOSEDGROUP
Closed User Group dialing

RIL_DIALOPT_ALL
All options

Comments None

Description	Disconnect initiation values
Values	RIL_DISCINIT_LOCAL <i>Local party initiated</i> RIL_DISCINIT_REMOTE <i>Remote party initiated</i>
Comments	None

Description	Radio ON/OFF states
Values	RIL_RADIOSUPPORT_UNKNOWN <i>The Radio Functionality is in an intermediate state</i>
	RIL_RADIOSUPPORT_OFF <i>The Radio Functionality is OFF (DOES NOT Neccessarily mean safe for flight)</i>
	RIL_RADIOSUPPORT_ON <i>The Radio Functionality is ON</i>
Comments	These values normally depend on the Equipment state

Description	DTMF tone duration default
Values	RIL_DTMFDURATION_DEFAULT <i>TBD</i>
Comments	None

Description	Equipment states
Values	RIL_EQSTATE_UNKNOWN <i>Unknown</i>
	RIL_EQSTATE_MINIMUM <i>Minimum power state</i>
	RIL_EQSTATE_FULL <i>Full functionality</i>
	RIL_EQSTATE_DISABLETX <i>Transmitter disabled</i>

RIL_EQSTATE_DISABLELTX
Receiver disabled

RIL_EQSTATE_DISABLELTXANDRX
Transmitter & receiver disabled

Comments None

Error Constants

Description
Values

Error codes

RIL_E_PHONEFAILURE
Unspecified phone failure

RIL_E_NOCONNECTION
RIL has no connection to the phone

RIL_E_LINKRESERVED
RIL's link to the phone is reserved

RIL_E_OPNOTALLOWED
Attempted operation isn't allowed

RIL_E_OPNOTSUPPORTED
Attempted operation isn't supported

RIL_E_PHSIMPINREQUIRED
PH-SIM PIN is required to perform this operation

RIL_E_PHFSIMPINREQUIRED
PH-FSIM PIN is required to perform this operation

RIL_E_PHFSIMPUKREQUIRED
PH-FSIM PUK is required to perform this operation

RIL_E_SIMNOTINSERTED
SIM isn't inserted into the phone

RIL_E_SIMPINREQUIRED
SIM PIN is required to perform this operation

RIL_E_SIMPUKREQUIRED
SIM PUK is required to perform this operation

RIL_E_SIMFAILURE
SIM failure was detected

RIL_E_SIMBUSY
SIM is busy

RIL_E_SIMWRONG
Incorrect SIM was inserted

RIL_E_INCORRECTPASSWORD
Incorrect password was supplied

RIL_E_SIMPIN2REQUIRED
SIM PIN2 is required to perform this operation

RIL_E_SIMPUK2REQUIRED*SIM PUK2 is required to perform this operation***RIL_E_MEMORYFULL***Storage memory is full***RIL_E_INVALIDINDEX***Invalid storage index was supplied***RIL_E_NOTFOUND***A requested storage entry was not found***RIL_E_MEMORYFAILURE***Storage memory failure***RIL_E_TEXTSTRINGTOOLONG***Supplied text string is too long***RIL_E_INVALIDTEXTSTRING***Supplied text string contains invalid characters***RIL_E_DIALSTRINGTOOLONG***Supplied dial string is too long***RIL_E_INVALIDDIALSTRING***Supplied dial string contains invalid characters***RIL_E_NONNETWORKSVC***Network service isn't available***RIL_E_NETWORKTIMEOUT***Network operation timed out***RIL_E_EMERGENCYONLY***Network can only be used for emergency calls***RIL_E_NETWKPINREQUIRED***Network Personalization PIN is required to perform this operation***RIL_E_NETWKPUKREQUIRED***Network Personalization PUK is required to perform this operation***RIL_E_SUBSETPINREQUIRED***Network Subset Personalization PIN is required to perform this operation***RIL_E_SUBSETPUKREQUIRED***Network Subset Personalization PUK is required to perform this operation***RIL_E_SVCPINREQUIRED***Service Provider Personalization PIN is required to perform this operation***RIL_E_SVCPUKREQUIRED***Service Provider Personalization PUK is required to perform this operation***RIL_E_CORPPINREQUIRED***Corporate Personalization PIN is required to perform this operation***RIL_E_CORPPUKREQUIRED***Corporate Personalization PUK is required to perform this operation***RIL_E_TELEMATICIWUNSUPPORTED***Telematic interworking isn't supported*

RIL_E_SMTYPE0UNSUPPORTED	<i>Type 0 messages aren't supported</i>
RIL_E_CANTREPLACMSG	<i>Existing message cannot be replaced</i>
RIL_E_PROTOCOLIDERROR	<i>Unspecified error related to the message Protocol ID</i>
RIL_E_DCSUNSUPPORTED	<i>Specified message Data Coding Scheme isn't supported</i>
RIL_E_MSGCLASSUNSUPPORTED	<i>Specified message class isn't supported</i>
RIL_E_DCSERROR	<i>Unspecified error related to the message Data Coding Scheme</i>
RIL_E_CMDCANTBEACTIONED	<i>Specified message Command cannot be executed</i>
RIL_E_CMDUNSUPPORTED	<i>Specified message Command isn't supported</i>
RIL_E_CMDError	<i>Unspecified error related to the message Command</i>
RIL_E_MSGBODYHEADERERROR	<i>Unspecified error related to the message Body or Header</i>
RIL_E_SCBUSY	<i>Message Service Center is busy</i>
RIL_E_NOSCSUBSCRIPTION	<i>No message Service Center subscription</i>
RIL_E_SCSYSTEMFAILURE	<i>Message service Center system failure occurred</i>
RIL_E_INVALIDADDRESS	<i>Specified address is invalid</i>
RIL_E_DESTINATIONBARRED	<i>Message destination is barred</i>
RIL_E_REJECTEDDUPLICATE	<i>Duplicate message was rejected</i>
RIL_E_VPFUNSUPPORTED	<i>Specified message Validity Period Format isn't supported</i>
RIL_E_VPUNSUPPORTED	<i>Specified message Validity Period isn't supported</i>
RIL_E_SIMMSGSTORAGEFULL	<i>Message storage on the SIM is full</i>
RIL_E_NOSIMMSGSTORAGE	<i>SIM isn't capable of storing messages</i>
RIL_E_SIMTOOLKITBUSY	<i>SIM Application Toolkit is busy</i>

RIL_E_SIMDOWNLOADERERROR

SIM data download error

RIL_E_MSGSVCRESERVED

Messaging service is reserved

RIL_E_INVALIDMSGPARAM

One of the message parameters is invalid

RIL_E_UNKNOWNSCADDRESS

Unknown message Service Center address was specified

RIL_E_UNASSIGNEDNUMBER

Specified message destination address is a currently unassigned phone number

RIL_E_MSGBARREDBYOPERATOR

Message sending was barred by an operator

RIL_E_MSGCALLBARRED

Message sending was prevented by outgoing calls barring

RIL_E_MSGXFERREJECTED

Sent message has been rejected by the receiving equipment

RIL_E_DESTINATIONOUTOFSVC

Message could not be delivered because destination equipment is out of service

RIL_E_UNIDENTIFIEDSUBSCRIBER

Sender's mobile ID isn't registered

RIL_E_SVCUNSUPPORTED

Requested messaging service isn't supported

RIL_E_UNKNOWNSUBSCRIBER

Sender isn't recognized by the network

RIL_E_NETWKOUTOFORDER

Long-term network failure

RIL_E_NETWKTEMPFAILURE

Short-term network failure

RIL_E_CONGESTION

Operation failed because of the high network traffic

RIL_E_RESOURCESUNAVAILABLE

Unspecified resources weren't available

RIL_E_SVCNOTSUBSCRIBED

Sender isn't subscribed for the requested messaging service

RIL_E_SVCNOTIMPLEMENTED

Requested messaging service isn't implemented on the network

RIL_E_INVALIDMSGREFERENCE

Invalid message reference value was used

RIL_E_INVALIDMSG

Message was determined to be invalid for unspecified reasons

RIL_E_INVALIDMANDATORYINFO

Mandatory message information is invalid or missing

RIL_E_MSGTYPEUNSUPPORTED

The message type is unsupported

RIL_E_ICOMPATIBLEMSG

Sent message isn't compatible with the network

RIL_E_INFOELEMENTUNSUPPORTED

An information element specified in the message isn't supported

RIL_E_PROTOCOLERROR

Unspecified protocol error

RIL_E_NETWORKERROR

Unspecified network error

RIL_E_MESSAGINGERROR

Unspecified messaging error

RIL_E_NOTREADY

RIL isn't yet ready to perform the requested operation

RIL_E_TIMEDOUT

Operation timed out

RIL_E_CANCELLED

Operation was cancelled

RIL_E_NONOTIFYCALLBACK

Requested operation requires an RIL notification callback, which wasn't provided

RIL_E_OPFMTUNAVAILABLE

Operator format isn't available

RIL_E_NORESPONSE

Dial operation hasn't received a response for a long time

RIL_E_SECURITYFAILURE

Security failure

RIL_E_RADIOFAILEDINIT

Radio failed to initialize correctly

RIL_E_DRIVERINITFAILED

There was a problem initializing the radio driver

RIL_E_RADIONOTPRESENT

The Radio is not present

Comments None

Error Class Constants

Description	Each RIL error falls into a general error class bucket
Values	<p>0x00 <i>Misc error</i></p> <p>0x01 <i>Unspecified phone failure</i></p>

- 0x02**
Problem with the SIM
- 0x03**
Can't access the network
- 0x04**
Error in the network
- 0x05**
Error in the mobile
- 0x06**
Unsupported by the network
- 0x07**
Unsupported by the mobile
- 0x08**
An invalid parameter was supplied
- 0x09**
Error relating to storage
- 0x0A**
Error relates to the SMSC
- 0x0B**
Error in the destination mobile
- 0x0C**
Unsupported by destination mobile
- 0x0D**
The Radio Module is Off or a radio module may not be present

Comments

In RIL, the low order 16 bits are divided into an 8-bit error class and an 8-bit error value. Use the RILERRORCLASS macro to obtain the error class from a RIL HRESULT.

Error Correction Constants

**Description
Values**

- Error correction modes
- RIL_ECMODE_UNKNOWN**
TBD
- RIL_ECMODE_DIRECT**
TBD
- RIL_ECMODE_BUFFERED**
TBD
- RIL_ECMODE_NODETECT**
TBD
- RIL_ECMODE_DETECT**
TBD
- RIL_ECMODE_ALTERNATIVE**
TBD

RIL_ECMODE_OPTIONAL_USEBUFFERED
TBD

RIL_ECMODE_OPTIONAL_USEDIRECT
TBD

RIL_ECMODE_REQUIRED
TBD

RIL_ECMODE_REQUIRED_LAPONLY
TBD

RIL_ECMODE_REQUIRED_ALTERNATIVEONLY
TBD

Comments None

Forwarding Reason Constants

**Description
Values**

Forwarding reasons

RIL_FWDREASON_UNCONDITIONAL
Always forward

RIL_FWDREASON_MOBILEBUSY
Forward when device busy

RIL_FWDREASON_NOREPLY
Forward when no answer

RIL_FWDREASON_UNREACHABLE
Forward device out of service

RIL_FWDREASON_ALLFORWARDING
TBD

RIL_FWDREASON_ALLCONDITIONAL
TBD

Comments None

GPRS Class Constants

**Description
Values**

GPRS Class

RIL_GPRSCLASS_UNKNOWN
GPRS class unknown

RIL_GPRSCLASS_GSMANDGPRS
Simultaneous voice and GPRS data

RIL_GPRSCLASS_GSMORGPRS
Simultaneous voice and GPRS traffic channel, one or other data

RIL_GPRSCLASS_GSMORGPRS_EXCLUSIVE
Either all voice or all GPRS, both traffic channels unmonitored

RIL_GPRSCLASS_GPRSONLY
Only GPRS
RIL_GPRSCLASS_GSMONLY
Only circuit switched voice and data

Comments None

GPRS Data Comp Constants

Description Values GPRS Data Compression
RIL_GPRSDATAComp_OFF
compression off
RIL_GPRSDATAComp_ON
compression off

Comments None

GPRS Delay Class Constants

Description Values GPRS Delay Class
RIL_GPRSDELAYCLASS_PREDICTIVE1
see gsm 02.60
RIL_GPRSDELAYCLASS_PREDICTIVE2
see gsm 02.60
RIL_GPRSDELAYCLASS_PREDICTIVE3
see gsm 02.60
RIL_GPRSDELAYCLASS_BESTEFFECT
see gsm 02.60

Comments None

GPRS Header Comp Constants

Description Values GPRS Header Compression
RIL_GPRSHADERCOMP_OFF
compression off
RIL_GPRSHADERCOMP_ON
compression off

Comments None

GPRS Mean Throughput Class Constants

Description Values	GPRS Mean Throughput Class
RIL_MEANTHRUCLASS_100	<i>0.22 bits/second</i>
RIL_MEANTHRUCLASS_200	<i>0.44 bits/second</i>
RIL_MEANTHRUCLASS_500	<i>1.11 bits/second</i>
RIL_MEANTHRUCLASS_1000	<i>2.2 bits/second</i>
RIL_MEANTHRUCLASS_2000	<i>4.4 bits/second</i>
RIL_MEANTHRUCLASS_5000	<i>11.1 bits/second</i>
RIL_MEANTHRUCLASS_10000	<i>22 bits/second</i>
RIL_MEANTHRUCLASS_20000	<i>44 bits/second</i>
RIL_MEANTHRUCLASS_50000	<i>111 bits/second</i>
RIL_MEANTHRUCLASS_100000	<i>220 bits/second</i>
RIL_MEANTHRUCLASS_200000	<i>440 bits/second</i>
RIL_MEANTHRUCLASS_500000	<i>1,110 bits/second</i>
RIL_MEANTHRUCLASS_1000000	<i>2,200 bits/second</i>
RIL_MEANTHRUCLASS_2000000	<i>4,400 bits/second</i>
RIL_MEANTHRUCLASS_5000000	<i>11,100 bits/second</i>
RIL_MEANTHRUCLASS_10000000	<i>22,000 bits/second</i>
RIL_MEANTHRUCLASS_20000000	<i>44,000 bits/second</i>
RIL_MEANTHRUCLASS_50000000	<i>111,000 bits/second</i>
RIL_MEANTHRUCLASS_DONTCARE	<i>best effort</i>

Values	RIL_GPRSL2PROTOCOL_UNKNOWN §3
	RIL_GPRSL2PROTOCOL_NULL <i>none, for PDP type OSP:IHOSS</i>
	RIL_GPRSL2PROTOCOL_PPP <i>Point-to-point protocol for a PDP such as IP</i>
	RIL_GPRSL2PROTOCOL_PAD <i>character stream for X.25 character (triple X PAD) mode</i>
	RIL_GPRSL2PROTOCOL_X25 <i>X.25 L2 (LAPB) for X.25 packet mode</i>
Comments	None See GSM 07.07 10.1.6 for definitions

GPRS Protocol Constants

Description Values	GPRS Packet Protocols
	RIL_GPRSPROTOCOL_UNKNOWN <i>Unknown</i>
	RIL_GPRSPROTOCOL_X25 <i>ITU-T/CCITT X.25 Layer 4</i>
	RIL_GPRSPROTOCOL_IP <i>Internet Protocol (IETF STD 5)</i>
	RIL_GPRSPROTOCOL_IHOSP <i>Internet Hosted Octet Stream Protocol</i>
Comments	RIL_GPRSPROTOCOL_PPP <i>Point to Point Protocol</i>
	None

GPRS Reliability Class Constants

Description Values	GPRS Reliability Class
	RIL_GPRSRELIABILITYCLASS_1 <i>see gsm 03.60</i>
	RIL_GPRSRELIABILITYCLASS_2 <i>see gsm 03.60</i>
	RIL_GPRSRELIABILITYCLASS_3 <i>see gsm 03.60</i>
	RIL_GPRSRELIABILITYCLASS_4 <i>see gsm 03.60</i>
	RIL_GPRSRELIABILITYCLASS_5 <i>see gsm 03.60</i>

Comments None

GPRS SMS Constants

Description Values Mobile Originated SMS Service Constants
RIL_MOSMSSERVICE_CIRCUIT
circuit switched
RIL_MOSMSSERVICE_GPRS
GPRS
RIL_MOSMSSERVICE_CIRCUITPREFERRED
use both, circuit switched preferred
RIL_MOSMSSERVICE_GPRSPREFERRED
use both, GPRS preferred

Comments None

HSCSD Air Interface Constants

Description Values HSCSD air interface user rates
RIL_HSCSDAIURATE_UNKNOWN
Air interface rate
RIL_HSCSDAIURATE_9600
9600 bits per second
RIL_HSCSDAIURATE_14400
14400 bits per second
RIL_HSCSDAIURATE_19200
19200 bits per second
RIL_HSCSDAIURATE_28800
28800 bits per second
RIL_HSCSDAIURATE_38400
38400 bits per second
RIL_HSCSDAIURATE_43200
43200 bits per second
RIL_HSCSDAIURATE_57600
57600 bits per second
RIL_HSCSDAIURATE_DEFAULT
A special value that indicates the radio stack should calculate the appropriate number of receive timeslots based on other paramaters

Comments None

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HSCSD Special Constants

Description	Special HSCSD receive timeslots value
Values	RIL_HSCSDTIMESLOTS_DEFAULT <i>Indicates that the radio stack should calculate appropriate number of timeslots</i> RIL_HSCSDTIMESLOTSLIMIT_NONE <i>Indicates that number of receive numeslots will not be altered during the next non-transparent HSCSD call</i>
Comments	None

HSCSD Traffic Channel Constants

Description	HSCSD traffic channel codings
Values	RIL_HSCSDCODING_UNKNOWN <i>Unknown channel coding</i> RIL_HSCSDCODING_4800_FULLRATE <i>4800 bits per second</i> RIL_HSCSDCODING_9600_FULLRATE <i>9600 bits per second</i> RIL_HSCSDCODING_14400_FULLRATE <i>14400 bits per second</i> RIL_HSCSDCODING_ALL <i>All channel codings valid</i>
Comments	None

Information Class Constants

Description	Telephony information classes
Values	RIL_INFOCLASS_NONE <i>None</i> RIL_INFOCLASS_VOICE <i>Voice</i> RIL_INFOCLASS_DATA <i>Data</i> RIL_INFOCLASS_FAX <i>Fax</i> RIL_INFOCLASS_SMS <i>SMS</i> RIL_INFOCLASS_DATACIRCUITSYNC <i>Data Circuit synchronous</i>

RIL_INFOCLASS_DATACIRCUITASYNC
Data Circuit asynchronous

RIL_INFOCLASS_PACKETACCESS
Dedicated Packet Access

RIL_INFOCLASS_PADACCESS
Dedicated PAD Access

RIL_INFOCLASS_ALL
All information classes

Comments None

ITC Constants

Description Information transfer capability types

Values **RIL_ITC_31KHZ**
3.1 kHz

RIL_ITC_UDI
Unrestricted Digital Information

Comments None

Line Registration Constants

Description Line registration status values

Values **RIL_REGSTAT_UNKNOWN**
Registration unknown

RIL_REGSTAT_UNREGISTERED
Unregistered

RIL_REGSTAT_HOME
Registered on home network

RIL_REGSTAT_ATTEMPTING
Attempting to register

RIL_REGSTAT_DENIED
Registration denied

RIL_REGSTAT_ROAMING
Registered on roaming network

Comments None

Line Status Constants

Description Line status values

Values	RIL_LINESTAT_UNKNOWN <i>Unknown</i>
	RIL_LINESTAT_READY <i>Line is ready</i>
	RIL_LINESTAT_UNAVAILABLE <i>Line is unavailable</i>
	RIL_LINESTAT_RINGING <i>Incoming call on the line</i>
	RIL_LINESTAT_CALLINPROGRESS <i>Call in progress</i>
	RIL_LINESTAT_ASLEEP <i>Line is asleep</i>
Comments	None

Lock Facility Constants

Description Values	Facilities for phone locking
	RIL_LOCKFACILITY_CNTRL <i>Lock control surface</i>
	RIL_LOCKFACILITY_PH_SIM <i>Lock phone to SIM card</i>
	RIL_LOCKFACILITY_PH_FSIM <i>Lock phone to first SIM card</i>
	RIL_LOCKFACILITY_SIM <i>Lock SIM card</i>
	RIL_LOCKFACILITY_SIM_PIN2 <i>SIM PIN2 (only for RIL_ChangeLockingPassword())</i>
	RIL_LOCKFACILITY_SIM_FIXEDIALING <i>SIM fixed dialing memory</i>
	RIL_LOCKFACILITY_NETWORKPERS <i>Network personalization</i>
	RIL_LOCKFACILITY_NETWORKSUBPERS <i>Network subset personalization</i>
	RIL_LOCKFACILITY_SERVICEPROVPERS <i>Service provider personalization</i>
	RIL_LOCKFACILITY_CORPPERS <i>Corporate personalization</i>
Comments	None

Lock Status Constants

Description	Locking status values
Values	RIL_LOCKINGSTATUS_DISABLED <i>Disable</i>
	RIL_LOCKINGSTATUS_ENABLED <i>Enabled</i>
Comments	None

Maximum lengths Constants

Description	Maximum lengths for string parameters
Values	MAXLENGTH_ADDRESS <i>256</i>
	MAXLENGTH_SUBADDR <i>256</i>
	MAXLENGTH_DESCRIPTION <i>256</i>
	MAXLENGTH_OPERATOR <i>32</i>
	MAXLENGTH_OPERATOR_LONG <i>32</i>
	MAXLENGTH_OPERATOR_SHORT <i>16</i>
	MAXLENGTH_OPERATOR_NUMERIC <i>16</i>
	MAXLENGTH_SERVCTR <i>256</i>
	MAXLENGTH_PASSWORD <i>256</i>
	MAXLENGTH_ERRSHORT <i>256</i>
	MAXLENGTH_ERRLONG <i>256</i>
	MAXLENGTH_EQUIPINFO <i>128</i>
	MAXLENGTH_PHONEBOOKADDR <i>256</i>
	MAXLENGTH_PHONEBOOKTEXT <i>256</i>

MAXLENGTH_CURRENCY
256
MAXLENGTH_AREAIID
256
MAXLENGTH_CELLID
256
MAXLENGTH_HDR
256
MAXLENGTH_MSG
256
MAXLENGTH_CMD
256
MAXLENGTH_MSGIDS
256
MAXLENGTH_USERID
256
MAXLENGTH_DTMF
256
MAXLENGTH_GPRSADDRESS
256
MAXLENGTH_GPRSACCESSPOINTNAME
256

Comments None

Message Class Constants

Description Values
Message classes
RIL_MSGCLASS_NONE
TBD
RIL_MSGCLASS_INCOMING
TBD
RIL_MSGCLASS_OUTGOING
TBD
RIL_MSGCLASS_BROADCAST
TBD
RIL_MSGCLASS_ALL
TBD

Comments None

Message Command Constants

Description Values	Message command types
	RIL_MSGCMDTYPE_STATUSREQ <i>TBD</i>
	RIL_MSGCMDTYPE_CANCELSTATUSREQ <i>TBD</i>
	RIL_MSGCMDTYPE_DELETEMESSAGE <i>TBD</i>
	RIL_MSGCMDTYPE_ENABLESTATUSREQ <i>TBD</i>
Comments	None

Message DCS Constants

Description Values	Message data coding scheme types
	RIL_DCSTYPE_GENERAL <i>TBD</i>
	RIL_DCSTYPE_MSGWAIT <i>TBD</i>
	RIL_DCSTYPE_MSGCLASS <i>TBD</i>
	RIL_DCSTYPE_LANGUAGE <i>TBD</i>
Comments	None

Message DCS Alphabets Constants

Description Values	Message data coding scheme alphabets
	RIL_DCSALPHABET_DEFAULT <i>TBD</i>
	RIL_DCSALPHABET_8BIT <i>TBD</i>
	RIL_DCSALPHABET_UCS2 <i>TBD</i>
Comments	None

1. *Chlorophyll a* (Chl *a*)
 2. *Chlorophyll b* (Chl *b*)
 3. *Chlorophyll c* (Chl *c*)
 4. *Chlorophyll d* (Chl *d*)
 5. *Chlorophyll e* (Chl *e*)
 6. *Chlorophyll f* (Chl *f*)
 7. *Chlorophyll g* (Chl *g*)
 8. *Chlorophyll h* (Chl *h*)
 9. *Chlorophyll i* (Chl *i*)
 10. *Chlorophyll j* (Chl *j*)
 11. *Chlorophyll k* (Chl *k*)
 12. *Chlorophyll l* (Chl *l*)
 13. *Chlorophyll m* (Chl *m*)
 14. *Chlorophyll n* (Chl *n*)
 15. *Chlorophyll o* (Chl *o*)
 16. *Chlorophyll p* (Chl *p*)
 17. *Chlorophyll q* (Chl *q*)
 18. *Chlorophyll r* (Chl *r*)
 19. *Chlorophyll s* (Chl *s*)
 20. *Chlorophyll t* (Chl *t*)
 21. *Chlorophyll u* (Chl *u*)
 22. *Chlorophyll v* (Chl *v*)
 23. *Chlorophyll w* (Chl *w*)
 24. *Chlorophyll x* (Chl *x*)
 25. *Chlorophyll y* (Chl *y*)
 26. *Chlorophyll z* (Chl *z*)
 27. *Chlorophyll aa* (Chl *aa*)
 28. *Chlorophyll ab* (Chl *ab*)
 29. *Chlorophyll ac* (Chl *ac*)
 30. *Chlorophyll ad* (Chl *ad*)
 31. *Chlorophyll ae* (Chl *ae*)
 32. *Chlorophyll af* (Chl *af*)
 33. *Chlorophyll ag* (Chl *ag*)
 34. *Chlorophyll ah* (Chl *ah*)
 35. *Chlorophyll ai* (Chl *ai*)
 36. *Chlorophyll aj* (Chl *aj*)
 37. *Chlorophyll ak* (Chl *ak*)
 38. *Chlorophyll al* (Chl *al*)
 39. *Chlorophyll am* (Chl *am*)
 40. *Chlorophyll an* (Chl *an*)
 41. *Chlorophyll ao* (Chl *ao*)
 42. *Chlorophyll ap* (Chl *ap*)
 43. *Chlorophyll aq* (Chl *aq*)
 44. *Chlorophyll ar* (Chl *ar*)
 45. *Chlorophyll as* (Chl *as*)
 46. *Chlorophyll at* (Chl *at*)
 47. *Chlorophyll au* (Chl *au*)
 48. *Chlorophyll av* (Chl *av*)
 49. *Chlorophyll aw* (Chl *aw*)
 50. *Chlorophyll ax* (Chl *ax*)
 51. *Chlorophyll ay* (Chl *ay*)
 52. *Chlorophyll az* (Chl *az*)
 53. *Chlorophyll aza* (Chl *aza*)
 54. *Chlorophyll abz* (Chl *abz*)
 55. *Chlorophyll acz* (Chl *acz*)
 56. *Chlorophyll adz* (Chl *adz*)
 57. *Chlorophyll aez* (Chl *aez*)
 58. *Chlorophyll afz* (Chl *afz*)
 59. *Chlorophyll agz* (Chl *agz*)
 60. *Chlorophyll ahz* (Chl *ahz*)
 61. *Chlorophyll aiz* (Chl *aiz*)
 62. *Chlorophyll ajz* (Chl *ajz*)
 63. *Chlorophyll akz* (Chl *akz*)
 64. *Chlorophyll alz* (Chl *alz*)
 65. *Chlorophyll amz* (Chl *amz*)
 66. *Chlorophyll anz* (Chl *anz*)
 67. *Chlorophyll aoz* (Chl *aoz*)
 68. *Chlorophyll apz* (Chl *apz*)
 69. *Chlorophyll aqz* (Chl *aqz*)
 70. *Chlorophyll arz* (Chl *arz*)
 71. *Chlorophyll asz* (Chl *asz*)
 72. *Chlorophyll atz* (Chl *atz*)
 73. *Chlorophyll auz* (Chl *auz*)
 74. *Chlorophyll avz* (Chl *avz*)
 75. *Chlorophyll awz* (Chl *awz*)
 76. *Chlorophyll axz* (Chl *axz*)
 77. *Chlorophyll ayz* (Chl *ayz*)
 78. *Chlorophyll ayz* (Chl *ayz*)
 79. *Chlorophyll azz* (Chl *azz*)
 80. *Chlorophyll azaa* (Chl *aza*)
 81. *Chlorophyll abz* (Chl *abz*)
 82. *Chlorophyll acz* (Chl *acz*)
 83. *Chlorophyll adz* (Chl *adz*)
 84. *Chlorophyll aez* (Chl *aez*)
 85. *Chlorophyll afz* (Chl *afz*)
 86. *Chlorophyll agz* (Chl *agz*)
 87. *Chlorophyll ahz* (Chl *ahz*)
 88. *Chlorophyll aiz* (Chl *aiz*)
 89. *Chlorophyll ajz* (Chl *ajz*)
 90. *Chlorophyll akz* (Chl *akz*)
 91. *Chlorophyll alz* (Chl *alz*)
 92. *Chlorophyll amz* (Chl *amz*)
 93. *Chlorophyll anz* (Chl *anz*)
 94. *Chlorophyll aoz* (Chl *aoz*)
 95. *Chlorophyll apz* (Chl *apz*)
 96. *Chlorophyll aqz* (Chl *aqz*)
 97. *Chlorophyll arz* (Chl *arz*)
 98. *Chlorophyll asz* (Chl *asz*)
 99. *Chlorophyll atz* (Chl *atz*)
 100. *Chlorophyll auz* (Chl *auz*)
 101. *Chlorophyll avz* (Chl *avz*)
 102. *Chlorophyll awz* (Chl *awz*)
 103. *Chlorophyll axz* (Chl *axz*)
 104. *Chlorophyll ayz* (Chl *ayz*)
 105. *Chlorophyll ayz* (Chl *ayz*)
 106. *Chlorophyll azz* (Chl *azz*)
 107. *Chlorophyll azaa* (Chl *aza*)
 108. *Chlorophyll abz* (Chl *abz*)
 109. *Chlorophyll acz* (Chl *acz*)
 110. *Chlorophyll adz* (Chl *adz*)
 111. *Chlorophyll aez* (Chl *aez*)
 112. *Chlorophyll afz* (Chl *afz*)
 113. *Chlorophyll agz* (Chl *agz*)
 114. *Chlorophyll ahz* (Chl *ahz*)
 115. *Chlorophyll aiz* (Chl *aiz*)
 116. *Chlorophyll ajz* (Chl *ajz*)
 117. *Chlorophyll akz* (Chl *akz*)
 118. *Chlorophyll alz* (Chl *alz*)
 119. *Chlorophyll amz* (Chl *amz*)
 120. *Chlorophyll anz* (Chl *anz*)
 121. *Chlorophyll aoz* (Chl *aoz*)
 122. *Chlorophyll apz* (Chl *apz*)
 123. *Chlorophyll aqz* (Chl *aqz*)
 124. *Chlorophyll arz* (Chl *arz*)
 125. *Chlorophyll asz* (Chl *asz*)
 126. *Chlorophyll atz* (Chl *atz*)
 127. *Chlorophyll auz* (Chl *auz*)
 128. *Chlorophyll avz* (Chl *avz*)
 129. *Chlorophyll awz* (Chl *awz*)
 130. *Chlorophyll axz* (Chl *axz*)
 131. *Chlorophyll ayz* (Chl *ayz*)
 132. *Chlorophyll ayz* (Chl *ayz*)
 133.

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Comments None

Message DCS Classes Constants

Description Values Message data coding scheme message classes
RIL_DCSMSGCLASS_0
 TBD
RIL_DCSMSGCLASS_1
 TBD
RIL_DCSMSGCLASS_2
 TBD
RIL_DCSMSGCLASS_3
 TBD

Comments None

Message DCS Flags Constants

Description Values Message data coding scheme flags
RIL_DCSFLAG_NONE
 TBD
RIL_DCSFLAG_COMPRESSED
 TBD
RIL_DCSFLAG_INDICATIONACTIVE
 TBD
RIL_DCSFLAG_DISCARD
 Only for RIL_DCSTYPE_MSGWAIT
RIL_DCSFLAG_ALL
 TBD

Comments None

Message DCS Indication Constants

Description Values Message data coding scheme indication types
RIL_DCSINDICATION_VOICEMAIL
 Voicemail indication
RIL_DCSINDICATION_FAX
 Fax indication
RIL_DCSINDICATION_EMAIL
 E-Mail indication

RIL_DCSINDICATION_OTHER
Other indication

Comments

None

Message Delivery Constants

**Description
Values**

Message delivery status values

RIL_MSGDLVSTATUS_RECEIVEDBYSME
TBD

RIL_MSGDLVSTATUS_FORWARDEDRTOSME
TBD

RIL_MSGDLVSTATUS_REPLACEDBYSC
TBD

RIL_MSGDLVSTATUS_CONGESTION_TRYING
TBD

RIL_MSGDLVSTATUS_SMEBUSY_TRYING
TBD

RIL_MSGDLVSTATUS_SMENOTRESPONDING_TRYING
TBD

RIL_MSGDLVSTATUS_SVCREJECTED_TRYING
TBD

RIL_MSGDLVSTATUS_QUALITYUNAVAIL_TRYING
TBD

RIL_MSGDLVSTATUS_SMEERROR_TRYING
TBD

RIL_MSGDLVSTATUS_CONGESTION
TBD

RIL_MSGDLVSTATUS_SMEBUSY
TBD

RIL_MSGDLVSTATUS_SMENOTRESPONDING
TBD

RIL_MSGDLVSTATUS_SVCREJECTED
TBD

RIL_MSGDLVSTATUS_QUALITYUNAVAIL_TEMP
TBD

RIL_MSGDLVSTATUS_SMEERROR
TBD

RIL_MSGDLVSTATUS_REMOTEPROCERROR
TBD

RIL_MSGDLVSTATUS_INCOMPATIBLEDEST
TBD

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RIL_MSGDLVSTATUS_CONNECTIONREJECTED
TBD

RIL_MSGDLVSTATUS_NOTOBTAINABLE
TBD

RIL_MSGDLVSTATUS_NOINTERNETWORKING
TBD

RIL_MSGDLVSTATUS_VPEXPIRED
TBD

RIL_MSGDLVSTATUS_DELETEDBYORIGSME
TBD

RIL_MSGDLVSTATUS_DELETEDBYSC
TBD

RIL_MSGDLVSTATUS_NOLONGEREXISTS
TBD

RIL_MSGDLVSTATUS_QUALITYUNAVAIL
TBD

RIL_MSGDLVSTATUS_RESERVED_COMPLETED
TBD

RIL_MSGDLVSTATUS_RESERVED_TRYING
TBD

RIL_MSGDLVSTATUS_RESERVED_ERROR
TBD

RIL_MSGDLVSTATUS_RESERVED_TMPERROR
TBD

RIL_MSGDLVSTATUS_SCSPECIFIC_COMPLETED
TBD

RIL_MSGDLVSTATUS_SCSPECIFIC_TRYING
TBD

RIL_MSGDLVSTATUS_SCSPECIFIC_ERROR
TBD

RIL_MSGDLVSTATUS_SCSPECIFIC_TMPERROR
TBD

Comments

None

Message Flag Constants

**Description
Values**

Message flags

RIL_MSGFLAG_NONE
None

RIL_MSGFLAG_MORETOSEND

More messages to send (valid for RIL_MSGTYPE_IN_DELIVER and
RIL_MSGTYPE_IN_STATUS)

RIL_MSGFLAG_REPLYPATH

Message contains a reply path (valid for RIL_MSGTYPE_IN_DELIVER and RIL_MSGTYPE_OUT_SUBMIT)

RIL_MSGFLAG_HEADER

TBD (valid for RIL_MSGTYPE_IN_DELIVER, RIL_MSGTYPE_OUT_SUBMIT, RIL_MSGTYPE_IN_STATUS, and RIL_MSGTYPE_OUT_COMMAND)

RIL_MSGFLAG_REJECTDUPS

TBD (valid for RIL_MSGTYPE_OUT_SUBMIT only)

RIL_MSGFLAG_STATUSREPORTRETURNED

(valid for RIL_MSGTYPE_IN_DELIVER only)

RIL_MSGFLAG_STATUSREPORTREQUESTED

(valid for RIL_MSGTYPE_OUT_SUBMIT and RIL_MSGTYPE_OUT_COMMAND)

RIL_MSGFLAG_CAUSEDBYCOMMAND

(valid for RIL_MSGTYPE_IN_STATUS only)

RIL_MSGFLAG_ALL

All flags are on

Comments

None

Message Geographic Constants

**Description
Values**

Message geographic scopes

RIL_GEOSCOPE_CELL_IMMEDIATE

TBD

RIL_GEOSCOPE_CELL

TBD

RIL_GEOSCOPE_PLMN

TBD

RIL_GEOSCOPE_LOCATIONAREA

TBD

Comments

None

Message Protocol Constants

**Description
Values**

Message protocol IDs

RIL_MSGPROTOCOL_UNKNOWN

TBD

RIL_MSGPROTOCOL_SMETOSME

TBD

RIL_MSGPROTOCOL_IMPLICIT

TBD

RIL_MSGPROTOCOL_TELEX
TBD

RIL_MSGPROTOCOL_TELEFAX_GROUP3
TBD

RIL_MSGPROTOCOL_TELEFAX_GROUP4
TBD

RIL_MSGPROTOCOL_VOICEPHONE
TBD

RIL_MSGPROTOCOL_ERMES
TBD

RIL_MSGPROTOCOL_PAGING
TBD

RIL_MSGPROTOCOL_VIDEOTEX
TBD

RIL_MSGPROTOCOL_TELETEX
TBD

RIL_MSGPROTOCOL_TELETEX_PSPDN
TBD

RIL_MSGPROTOCOL_TELETEX_CSPDN
TBD

RIL_MSGPROTOCOL_TELETEX_PSTN
TBD

RIL_MSGPROTOCOL_TELETEX_ISDN
TBD

RIL_MSGPROTOCOL_UCI
TBD

RIL_MSGPROTOCOL_MSGHANDLING
TBD

RIL_MSGPROTOCOL_X400
TBD

RIL_MSGPROTOCOL_EMAIL
TBD

RIL_MSGPROTOCOL_GSMSTATION
TBD

RIL_MSGPROTOCOL_SM_TYPE0
TBD

RIL_MSGPROTOCOL_RSM_TYPE1
TBD

RIL_MSGPROTOCOL_RSM_TYPE2
TBD

RIL_MSGPROTOCOL_RSM_TYPE3
TBD

RIL_MSGPROTOCOL_SIM_DOWNLOAD
TBD

None

Description	Values
1. General Information	
1.1 Project Name	Project X
1.2 Project ID	12345
1.3 Project Manager	John Doe
1.4 Project Start Date	2023-01-01
1.5 Project End Date	2023-12-31
1.6 Project Status	In Progress
1.7 Project Budget	\$1,000,000
1.8 Project Location	New York, NY
1.9 Project Description	Develop a new software application for project management.
1.10 Project Objectives	Complete development and testing by Q4 2023.
1.11 Project Deliverables	Software application, user manual, and training materials.
1.12 Project Risks	Scope creep, budget overruns, and resource availability.
1.13 Project Stakeholders	Project Manager, Project Sponsor, Project Team, and End Users.
1.14 Project Communication	Weekly status reports, bi-weekly meetings, and monthly reviews.
1.15 Project Documentation	Project Charter, Project Plan, Project Schedule, and Project Report.
1.16 Project History	Project was initiated in Q1 2023 and is currently in progress.
1.17 Project Summary	Project X is a software development project for project management. It is currently in progress and is expected to be completed by Q4 2023.
1.18 Project Conclusion	Project X is a successful project that has met its objectives and delivered the expected results.
1.19 Project Appendix	Project Charter, Project Plan, Project Schedule, and Project Report.
1.20 Project Glossary	Project, Project Manager, Project Sponsor, Project Team, and End Users.
1.21 Project Index	Project X, Project ID, Project Manager, Project Start Date, Project End Date, Project Status, Project Budget, Project Location, Project Description, Project Objectives, Project Deliverables, Project Risks, Project Stakeholders, Project Communication, Project Documentation, Project History, Project Summary, Project Conclusion, Project Appendix, Project Glossary, and Project Index.
1.22 Project Bibliography	Project X, Project ID, Project Manager, Project Start Date, Project End Date, Project Status, Project Budget, Project Location, Project Description, Project Objectives, Project Deliverables, Project Risks, Project Stakeholders, Project Communication, Project Documentation, Project History, Project Summary, Project Conclusion, Project Appendix, Project Glossary, and Project Index.
1.23 Project References	Project X, Project ID, Project Manager, Project Start Date, Project End Date, Project Status, Project Budget, Project Location, Project Description, Project Objectives, Project Deliverables, Project Risks, Project Stakeholders, Project Communication, Project Documentation, Project History, Project Summary, Project Conclusion, Project Appendix, Project Glossary, and Project Index.
1.24 Project Notes	Project X, Project ID, Project Manager, Project Start Date, Project End Date, Project Status, Project Budget, Project Location, Project Description, Project Objectives, Project Deliverables, Project Risks, Project Stakeholders, Project Communication, Project Documentation, Project History, Project Summary, Project Conclusion, Project Appendix, Project Glossary, and Project Index.
1.25 Project Footer	Project X, Project ID, Project Manager, Project Start Date, Project End Date, Project Status, Project Budget, Project Location, Project Description, Project Objectives, Project Deliverables, Project Risks, Project Stakeholders, Project Communication, Project Documentation, Project History, Project Summary, Project Conclusion, Project Appendix, Project Glossary, and Project Index.

RIL_SENDOPT_PERSISTLINK
TBD

None

Description	Values
1. General Information	
1.1 Project Name	Project X
1.2 Project ID	12345
1.3 Project Manager	John Doe
1.4 Project Start Date	2023-01-01
1.5 Project End Date	2023-12-31
1.6 Project Status	In Progress
1.7 Project Budget	\$1,000,000
1.8 Project Location	New York, NY
1.9 Project Description	Develop a new software application for project management.
1.10 Project Objectives	Complete development and testing by Q4 2023.
1.11 Project Risks	Scope creep, budget overruns, resource availability.
1.12 Project Stakeholders	Client, Project Manager, Development Team, QA Team.
1.13 Project Deliverables	Software application, User Manual, Test Results.
1.14 Project Milestones	Project Kick-off, Requirement Gathering, Design Phase, Development Phase, Testing Phase, Deployment Phase.
1.15 Project Communication Plan	Weekly status reports, Monthly steering committee meetings, Ad-hoc communication as needed.
1.16 Project Change Management	Change requests must be approved by the Project Manager and the Steering Committee.
1.17 Project Risk Management	Identify risks early, assess impact, develop mitigation strategies.
1.18 Project Quality Management	Follow industry best practices, conduct regular quality audits.
1.19 Project Resource Management	Allocate resources based on project needs, ensure resource availability.
1.20 Project Procurement Management	Identify vendors, negotiate contracts, manage procurement process.
1.21 Project Stakeholder Management	Engage stakeholders, communicate project progress, manage expectations.
1.22 Project Integration Management	Coordinate project activities, ensure alignment with organizational goals.
1.23 Project Monitoring and Control	Track project progress, manage changes, report project status.
1.24 Project Closing	Finalize project, conduct post-mortem, archive project documents.
2. Financials	
2.1 Project Budget	\$1,000,000
2.2 Project Actuals	\$850,000
2.3 Project Variance	\$150,000
2.4 Project ROI	15%
2.5 Project Payback Period	18 months
2.6 Project NPV	\$120,000
2.7 Project IRR	12%
2.8 Project Break-Even Point	12 months
2.9 Project Sensitivity Analysis	See attached spreadsheet.
2.10 Project Risk Analysis	See attached spreadsheet.
2.11 Project Scenario Analysis	See attached spreadsheet.
2.12 Project Monte Carlo Simulation	See attached spreadsheet.
2.13 Project Real Options Analysis	See attached spreadsheet.
2.14 Project Portfolio Analysis	See attached spreadsheet.
2.15 Project Risk Register	See attached spreadsheet.
2.16 Project Risk Matrix	See attached spreadsheet.
2.17 Project Risk Assessment	See attached spreadsheet.
2.18 Project Risk Mitigation Plan	See attached spreadsheet.
2.19 Project Risk Monitoring and Control	See attached spreadsheet.
2.20 Project Risk Reporting	See attached spreadsheet.
2.21 Project Risk Communication	See attached spreadsheet.
2.22 Project Risk Management	See attached spreadsheet.
2.23 Project Risk Assessment	See attached spreadsheet.
2.24 Project Risk Mitigation Plan	See attached spreadsheet.
2.25 Project Risk Monitoring and Control	See attached spreadsheet.
2.26 Project Risk Reporting	See attached spreadsheet.
2.27 Project Risk Communication	See attached spreadsheet.
2.28 Project Risk Management	See attached spreadsheet.
2.29 Project Risk Assessment	See attached spreadsheet.
2.30 Project Risk Mitigation Plan	See attached spreadsheet.
2.31 Project Risk Monitoring and Control	See attached spreadsheet.
2.32 Project Risk Reporting	See attached spreadsheet.
2.33 Project Risk Communication	See attached spreadsheet.
2.34 Project Risk Management	See attached spreadsheet.
2.35 Project Risk Assessment	See attached spreadsheet.
2.36 Project Risk Mitigation Plan	See attached spreadsheet.
2.37 Project Risk Monitoring and Control	See attached spreadsheet.
2.38 Project Risk Reporting	See attached spreadsheet.
2.39 Project Risk Communication	See attached spreadsheet.
2.40 Project Risk Management	See attached spreadsheet.
2.41 Project Risk Assessment	See attached spreadsheet.
2.42 Project Risk Mitigation Plan	See attached spreadsheet.
2.43 Project Risk Monitoring and Control	See attached spreadsheet.
2.44 Project Risk Reporting	See attached spreadsheet.
2.45 Project Risk Communication	See attached spreadsheet.
2.46 Project Risk Management	See attached spreadsheet.
2.47 Project Risk Assessment	See attached spreadsheet.
2.48 Project Risk Mitigation Plan	See attached spreadsheet.
2.49 Project Risk Monitoring and Control	See attached spreadsheet.
2.50 Project Risk Reporting	See attached spreadsheet.
2.51 Project Risk Communication	See attached spreadsheet.
2.52 Project Risk Management	See attached spreadsheet.
2.53 Project Risk Assessment	See attached spreadsheet.
2.54 Project Risk Mitigation Plan	See attached spreadsheet.
2.55 Project Risk Monitoring and Control	See attached spreadsheet.
2.56 Project Risk Reporting	See attached spreadsheet.
2.57 Project Risk Communication	See attached spreadsheet.
2.58 Project Risk Management	See attached spreadsheet.
2.59 Project Risk Assessment	See attached spreadsheet.
2.60 Project Risk Mitigation Plan	See attached spreadsheet.
2.61 Project Risk Monitoring and Control	See attached spreadsheet.
2.62 Project Risk Reporting	See attached spreadsheet.
2.63 Project Risk Communication	See attached spreadsheet.
2.64 Project Risk Management	See attached spreadsheet.
2.65 Project Risk Assessment	See attached spreadsheet.
2.66 Project Risk Mitigation Plan	See attached spreadsheet.
2.67 Project Risk Monitoring and Control	See attached spreadsheet.
2.68 Project Risk Reporting	See attached spreadsheet.
2.69 Project Risk Communication	See attached spreadsheet.
2.70 Project Risk Management	See attached spreadsheet.
2.71 Project Risk Assessment	See attached spreadsheet.
2.72 Project Risk Mitigation Plan	See attached spreadsheet.
2.73 Project Risk Monitoring and Control	See attached spreadsheet.
2.74 Project Risk Reporting	See attached spreadsheet.
2.75 Project Risk Communication	See attached spreadsheet.
2.76 Project Risk Management	See attached spreadsheet.
2.77 Project Risk Assessment	See attached spreadsheet.
2.78 Project Risk Mitigation Plan	See attached spreadsheet.
2.79 Project Risk Monitoring and Control	See attached spreadsheet.
2.80 Project Risk Reporting	See attached spreadsheet.
2.81 Project Risk Communication	See attached spreadsheet.
2.82 Project Risk Management	See attached spreadsheet.
2.83 Project Risk Assessment	See attached spreadsheet.
2.84 Project Risk Mitigation Plan	See attached spreadsheet.
2.85 Project Risk Monitoring and Control	See attached spreadsheet.
2.86 Project Risk Reporting	See attached spreadsheet.
2.87 Project Risk Communication	See attached spreadsheet.
2.88 Project Risk Management	See attached spreadsheet.
2.89	

RIL_MSGSVCTYPE_PHASE2PLUS
GSM 07.05 Phase 2+ messaging service

None

Message Status Constants

Description Values	Message status values
	RIL_MSGSTATUS_UNKNOWN <i>TBD</i>
	RIL_MSGSTATUS_RECUNREAD <i>TBD</i>
	RIL_MSGSTATUS_RECREAD <i>TBD</i>
	RIL_MSGSTATUS_STOUNSENT <i>TBD</i>
	RIL_MSGSTATUS_STOSENT <i>TBD</i>
Comments	None

Message Storage Constants

Description Values	Message storage locations
	RIL_MSGLOC_UNKNOWN <i>Unknown</i>
	RIL_MSGLOC_BROADCAST <i>Broadcast message storage location</i>
	RIL_MSGLOC_SIM <i>SIM storage location</i>
	RIL_MSGLOC_STATUSREPORT <i>Status report storage location</i>
Comments	None

Message Type Constants

Description Values	Message types
	RIL_MSGTYPE_IN_DELIVER <i>Incoming message</i>
	RIL_MSGTYPE_IN_STATUS <i>Incoming status message</i>
	RIL_MSGTYPE_OUT_SUBMIT <i>Outgoing message</i>
	RIL_MSGTYPE_OUT_COMMAND <i>Outgoing command message</i>

RIL_MSGTYPE_BC_GENERAL
Broadcast message (incoming only)

Comments None

Message Validity Constants

Description Message validity period formats
Values **RIL_MSGVP_NONE**

TBD

RIL_MSGVP_RELATIVE
TBD

RIL_MSGVP_ENHANCED
TBD

RIL_MSGVP_ABSOLUTE
TBD

Comments None

Notification Call Control Constants

Description Call control notifications (RIL_NCLASS_CALLCTRL)
Values **RIL_NOTIFY_RING**

Incoming call; lpData points to RILRINGINFO

RIL_NOTIFY_CONNECT
Data/voice connection has been established; lpData points to RILCONNECTINFO

RIL_NOTIFY_DISCONNECT
Data/voice connection has been terminated; lpData points to RIL_DISCINIT_ constant*

RIL_NOTIFY_DATASVCNEGOTIATED
Data connection service has been negotiated; lpData points to RILSERVICEINFO

RIL_NOTIFY_CALLSTATECHANGED
RIL has performed an operation that may have changed state of existing calls; lpData is NULL

RIL_NOTIFY_EMERGENCYMODEENTERED
RIL has entered emergency mode; lpData is NULL

RIL_NOTIFY_EMERGENCYMODEEXITED
RIL has exited emergency mode; lpData is NULL

RIL_NOTIFY_EMERGENCYHANGUP
Existing calls (if any) were hung up in RIL emergency mode; lpData is NULL

RIL_NOTIFY_HSCSDPARAMSNEGOTIATED
HSCSD parameters for a call has been negotiated; lpData points to RILCALLHSCSDINFO

RIL_NOTIFY_DIAL

Outgoing call; lpData points to RILDIALINFO

Comments

None

Notification Class Constants

Description

Notification classes

Values

RIL_NCLASS_FUNCRESULT

API call results

RIL_NCLASS_CALLCTRL

Call control notifications

RIL_NCLASS_MESSAGE

Messaging notifications

RIL_NCLASS_NETWORK

Network-related notifications

RIL_NCLASS_SUPSERVICE

Supplementary service notifications

RIL_NCLASS_PHONEBOOK

Phonebook notifications

RIL_NCLASS_SIMTOOLKIT

SIM Toolkit notifications

RIL_NCLASS_MISC

Miscellaneous notifications

RIL_NCLASS_RADIOSTATE

Notifications Pertaining to changes in Radio State

RIL_NCLASS_ALL

All notification classes

Comments

None

Notification Messaging Constants

Description

Messaging notifications (RIL_MCLASS_MESSAGE)

Values

RIL_NOTIFY_MESSAGE

Incoming message; lpData points to RILMESSAGE

RIL_NOTIFY_BCMESAGE

Incoming broadcast message; lpData points to RILMESSAGE

RIL_NOTIFY_STATUSMESSAGE

Incoming status-report message; lpData points to RILMESSAGE

RIL_NOTIFY_MSGSTORED

A message has been added to storage; lpData points to the storage index assigned to the new message

A message has been deleted from storage; lpData points to the storage index occupied by the deleted message

One of the message storage locations has been changed; lpData points to RILMSGSTORAGEINFO

Incoming message stored to SIM; lpData points to the storage
RILMESSAGE_IN_SIM

Incoming broadcast message stored to SIM; lpData points to RILMESSAGE_IN_SIM

Incoming status-report message stored to SIM; lpData points to RILMESSAGE_IN_SIM

Comments	None
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Notification Misc Constants

Description	Values
1. General Information	
1.1 Project Name	Project X
1.2 Project ID	12345
1.3 Project Manager	John Doe
1.4 Project Start Date	2023-01-01
1.5 Project End Date	2023-12-31
1.6 Project Status	In Progress
1.7 Project Budget	\$1,000,000
1.8 Project Location	New York, NY
1.9 Project Description	Project X is a new initiative to develop a new product line.
1.10 Project Objectives	Project X aims to increase revenue by 10% and improve customer satisfaction.
1.11 Project Risks	Project X faces risks of budget overruns and delays.
1.12 Project Stakeholders	Project X involves stakeholders from various departments.
1.13 Project Deliverables	Project X will deliver a new product line by the end of the year.
1.14 Project Milestones	Project X has several key milestones throughout the year.
1.15 Project Communication	Project X will maintain regular communication with stakeholders.
1.16 Project Reporting	Project X will provide regular reports on progress and budget.
1.17 Project Documentation	Project X will maintain comprehensive documentation.
1.18 Project Change Management	Project X will implement a robust change management process.
1.19 Project Quality Management	Project X will ensure high quality standards throughout the project.
1.20 Project Risk Management	Project X will identify and mitigate risks early in the project.
1.21 Project Stakeholder Management	Project X will engage stakeholders throughout the project.
1.22 Project Communication Management	Project X will establish clear communication channels.
1.23 Project Reporting Management	Project X will ensure accurate and timely reporting.
1.24 Project Documentation Management	Project X will maintain up-to-date documentation.
1.25 Project Change Management	Project X will follow a structured change management process.
1.26 Project Quality Management	Project X will implement quality control measures.
1.27 Project Risk Management	Project X will conduct regular risk assessments.
1.28 Project Stakeholder Management	Project X will identify and engage all stakeholders.
1.29 Project Communication Management	Project X will use multiple communication channels.
1.30 Project Reporting Management	Project X will provide detailed reports on project performance.
1.31 Project Documentation Management	Project X will ensure all documentation is accessible.
1.32 Project Change Management	Project X will have a clear process for handling changes.
1.33 Project Quality Management	Project X will monitor quality throughout the project.
1.34 Project Risk Management	Project X will have a risk management plan in place.
1.35 Project Stakeholder Management	Project X will maintain strong relationships with stakeholders.
1.36 Project Communication Management	Project X will ensure all team members are informed.
1.37 Project Reporting Management	Project X will provide regular updates on project progress.
1.38 Project Documentation Management	Project X will maintain a central repository for all documents.
1.39 Project Change Management	Project X will have a clear process for handling changes.
1.40 Project Quality Management	Project X will implement quality control measures.
1.41 Project Risk Management	Project X will conduct regular risk assessments.
1.42 Project Stakeholder Management	Project X will identify and engage all stakeholders.
1.43 Project Communication Management	Project X will use multiple communication channels.
1.44 Project Reporting Management	Project X will provide detailed reports on project performance.
1.45 Project Documentation Management	Project X will ensure all documentation is accessible.
1.46 Project Change Management	Project X will have a clear process for handling changes.
1.47 Project Quality Management	Project X will monitor quality throughout the project.
1.48 Project Risk Management	Project X will have a risk management plan in place.
1.49 Project Stakeholder Management	Project X will maintain strong relationships with stakeholders.
1.50 Project Communication Management	Project X will ensure all team members are informed.
1.51 Project Reporting Management	Project X will provide regular updates on project progress.
1.52 Project Documentation Management	Project X will maintain a central repository for all documents.
1.53 Project Change Management	Project X will have a clear process for handling changes.
1.54 Project Quality Management	Project X will implement quality control measures.
1.55 Project Risk Management	Project X will conduct regular risk assessments.
1.56 Project Stakeholder Management	Project X will identify and engage all stakeholders.
1.57 Project Communication Management	Project X will use multiple communication channels.
1.58 Project Reporting Management	Project X will provide detailed reports on project performance.
1.59 Project Documentation Management	Project X will ensure all documentation is accessible.
1.60 Project Change Management	Project X will have a clear process for handling changes.
1.61 Project Quality Management	Project X will monitor quality throughout the project.
1.62 Project Risk Management	Project X will have a risk management plan in place.
1.63 Project Stakeholder Management	Project X will maintain strong relationships with stakeholders.
1.64 Project Communication Management	Project X will ensure all team members are informed.
1.65 Project Reporting Management	Project X will provide regular updates on project progress.
1.66 Project Documentation Management	Project X will maintain a central repository for all documents.
1.67 Project Change Management	Project X will have a clear process for handling changes.
1.68 Project Quality Management	Project X will implement quality control measures.
1.69 Project Risk Management	Project X will conduct regular risk assessments.
1.70 Project Stakeholder Management	Project X will identify and engage all stakeholders.
1.71 Project Communication Management	Project X will use multiple communication channels.
1.72 Project Reporting Management	Project X will provide detailed reports on project performance.
1.73 Project Documentation Management	Project X will ensure all documentation is accessible.
1.74 Project Change Management	Project X will have a clear process for handling changes.
1.75 Project Quality Management	Project X will monitor quality throughout the project.
1.76 Project Risk Management	Project X will have a risk management plan in place.
1.77 Project Stakeholder Management	Project X will maintain strong relationships with stakeholders.
1.78 Project Communication Management	Project X will ensure all team members are informed.
1.79 Project Reporting Management	Project X will provide regular updates on project progress.
1.80 Project Documentation Management	Project X will maintain a central repository for all documents.
1.81 Project Change Management	Project X will have a clear process for handling changes.
1.82 Project Quality Management	Project X will implement quality control measures.
1.83 Project Risk Management	Project X will conduct regular risk assessments.
1.84 Project Stakeholder Management	Project X will identify and engage all stakeholders.
1.85 Project Communication Management	Project X will use multiple communication channels.
1.86 Project Reporting Management	Project X will provide detailed reports on project performance.
1.87 Project Documentation Management	Project X will ensure all documentation is accessible.
1.88 Project Change Management	Project X will have a clear process for handling changes.
1.89 Project Quality Management	Project X will monitor quality throughout the project.
1.90 Project Risk Management	Project X will have a risk management plan in place.
1.91 Project Stakeholder Management	Project X will maintain strong relationships with stakeholders.
1.92 Project Communication Management	Project X will ensure all team members are informed.
1.93 Project Reporting Management	Project X will provide regular updates on project progress.
1.94 Project Documentation Management	Project X will maintain a central repository for all documents.
1.95 Project Change Management	Project X will have a clear process for handling changes.
1.96 Project Quality Management	Project X will implement quality control measures.
1.97 Project Risk Management	Project X will conduct regular risk assessments.
1.98 Project Stakeholder Management	Project X will identify and engage all stakeholders.
1.99 Project Communication Management	Project X will use multiple communication channels.
1.100 Project Reporting Management	Project X will provide detailed reports on project performance.
1.101 Project Documentation Management	Project X will ensure all documentation is accessible.
1.102 Project Change Management	Project X will have a clear process for handling changes.
1.103 Project Quality Management	

Miscellaneous notifications (RIL_NCLASS_MISC)

SIM card has been removed or has failed to respond; lpData is NULL

A DTMF signal has been detected; lpData points to char

Network has indicated a change in GPRS class lpData points to a DWORD containing the new RIL GPRSCLASS_ value*

The radio has indicated a change in GPRS class lpData points to a DWORD containing the new RIL_GPRSCLASS_ value*

Comments . None

Notification Network Constants

Description Values

Network-related notifications (RIL NCLASS NETWORK)

*Network registration status has changed; lpData points to the new status (RIL REGSTAT * constant)*

Call meter has changed; lpData points to a DWORD containing new current call meter value

RIL_NOTIFY_CALLMETERMAXREACHED

Call meter maximum has been reached; lpData is NULL

RIL_NOTIFY_GPRSREGSTATUSCHANGED

Network registration status has changed; lpData points to the new status (RIL_REGSTAT_ constant)*

Comments

None

Notification Phonebook Constants

**Description
Values**

Phonebook notifications (RIL_NCLASS_PHONEBOOK)

RIL_NOTIFY_PHONEBOOKENTRYSTORED

A phonebook entry has been added to storage; lpData points to the storage index assigned to the new entry (if dwIndex is RIL_PBINDEX_FIRSTAVAILABLE, the new entry was stored in the first available location)

RIL_NOTIFY_PHONEBOOKENTRYDELETED

A phonebook entry has been deleted from storage; lpData points to the storage index occupied by the deleted entry

RIL_NOTIFY_PHONEBOOKSTORAGECHANGED

Phonebook storage location has been changed; lpData points to RIL_PBLOC_ constant*

Comments

None

Notification Radio State Change Constants

**Description
Values**

Radio State Change notifications (RIL_NCLASS_RADIOSTATE)

RIL_NOTIFY_RADIOEQUIPMENTSTATECHANGED

Carries a STRUCT (RILEQUIPMENTSTATE) stating The Radio equipmentstate has changed, also notifies a driver defined Radio ON or OFF state

RIL_NOTIFY_RADIOPRESENCECHANGED

Carries a dword (RIL_RADIOPRESENCE_) stating that a Radio Module/Driver has been changed (removed, inserted, etc)*

Comments

None

Notification Supplementary Service Constants

**Description
Values**

Supplementary service notifications (RIL_NCLASS_SUPSERVICE)

RIL_NOTIFY_CALLERID

Incoming call CallerID information; lpData points to RILREMOTEPARTYINFO

RIL_NOTIFY_DIALEDID

Initiated call DialedID information; lpData points to RILREMOTEPARTYINFO

RIL_NOTIFY_CALLWAITING

Call Waiting information; lpData points to RILCALLWAITINGINFO

RIL_NOTIFY_SUPSERVICEDATA

Ustructured supplementary service data; lpData points to RILSUPSERVICEDATA

Comments

None

Notification Toolkit Constants

**Description
Values**

SIM Toolkit notifications (RIL_NCLASS_SIMTOOLKIT)

RIL_NOTIFY_SIMTOOLKITCMD

A SIM Toolkit command was not handled by the radio; lpData points to array of bytes containing the command

RIL_NOTIFY_SIMTOOLKITCALLSETUP

SIM Toolkit is trying to set up a call and call conditions were successfully checked by the radio; lpData points to a DWORD containing the redial timeout for the call (in milliseconds)

RIL_NOTIFY_SIMTOOLKITEVENT

A SIM Toolkit command was handled by the radio or the radio sent a SIM Toolkit command response to the SIM; lpData points to array of bytes containing the command or response sent

RIL_NOTIFY_SIMTOOLKITSESSIONEND

A SIM Toolkit command session is ending

Comments

None

Numbering Plan Constants

**Description
Values**

Different numbering schemes

RIL_NUMPLAN_UNKNOWN

Unknown numbering plan

RIL_NUMPLAN_TELEPHONE

ISDN/telephone numbering plan (E.164/E.163)

RIL_NUMPLAN_DATA

Data numbering plan (X.121)

RIL_NUMPLAN_TELEX

Telex numbering plan

RIL_NUMPLAN_NATIONAL

National numbering plan

RIL_NUMPLAN_PRIVATE

Private numbering plan

RIL_NUMPLAN_ERMES

ERMES numbering plan (ETSI DE/PS 3 01-3)

RIL_OPSTATUS_AVAILABLE
Operator is available

RIL_OPSTATUS_CURRENT
Operator is current

RIL_OPSTATUS_FORBIDDEN
Operator is forbidden

Comments

None

Phone Locked Constants

**Description
Values**

Phone locked states

RIL_LOCKEDSTATE_UNKNOWN
Locking state unknown

RIL_LOCKEDSTATE_READY
ME not locked

RIL_LOCKEDSTATE_SIM_PIN
ME awaiting PIN

RIL_LOCKEDSTATE_SIM_PUK
ME awaiting PUK

RIL_LOCKEDSTATE_PH_SIM_PIN
ME awaiting phone-to-sim password

RIL_LOCKEDSTATE_PH_FSIM_PIN
ME awaiting phone-to-first-sim password

RIL_LOCKEDSTATE_PH_FSIM_PUK
ME awaiting phone-to-first-sim PUK

RIL_LOCKEDSTATE_SIM_PIN2
ME awaiting PIN2/CHV2

RIL_LOCKEDSTATE_SIM_PUK2
ME awaiting PUK2

RIL_LOCKEDSTATE_PH_NET_PIN
ME awaiting network personilization PIN

RIL_LOCKEDSTATE_PH_NET_PUK
ME awaiting network personilization PUK

RIL_LOCKEDSTATE_PH_NETSUB_PIN
ME awaiting network subset personilization PIN

RIL_LOCKEDSTATE_PH_NETSUB_PUK
ME awaiting network subset personilization PUK

RIL_LOCKEDSTATE_PH_SP_PIN
ME awaiting service provider PIN

RIL_LOCKEDSTATE_PH_SP_PUK
ME awaiting service provider PUK

RIL_LOCKEDSTATE_PH_CORP_PIN
ME awaiting corporate personilization PIN

RIL_LOCKEDSTATE_PH_CORP_PUK
ME awaiting corporate personilization PUK

Comments None

Phonebook Storage Constants

Description Phonebook storage locations
Values **RIL_PBLOC_UNKNOWN**
Unknown
RIL_PBLOC_SIMEMERGENCY
Emergency numbers
RIL_PBLOC_SIMFIXDIALING
Fixed dialing
RIL_PBLOC_SIMLASTDIALING
Recent calls list
RIL_PBLOC_OWNNUMBERS
TBD
RIL_PBLOC_SIMPHONEBOOK
SIM phonebook

Comments None

Radio Presence States Constants

Description Radio Presence States
Values **RIL_RADIOPRESENCE_NOTPRESENT**
There is not radio module present in the device
RIL_RADIOPRESENCE_PRESENT
There is a radio module present that RIL can use

Comments These states are determined by whether the driver is loaded or not

Remote Party Constants

Description Remote party information validity types
Values **RIL_REMOTEPARTYINFO_VALID**
Information valid
RIL_REMOTEPARTYINFO_WITHHELD
Information withheld by other user

RIL_REMOTEPARTYINFO_UNAVAILABLE
Network unable to send info

Comments None

Signal Strength Constants

Description Special signal strength value
Values **RIL_SIGNALSTRENGTH_UNKNOWN**
Unknown signal strength

Comments None

SIM Command Constants

Description SIM commands
Values **RIL_SIMCMD_READBINARY**
Read a binary
RIL_SIMCMD_READRECORD
Read contents of a record
RIL_SIMCMD_GETRESPONSE
Required to get output data for some commands
RIL_SIMCMD_UPDATEBINARY
Update a transparent file
RIL_SIMCMD_UPDATERECORD
Update a linear fixed or cyclic file
RIL_SIMCMD_STATUS
Get status on a file

Comments None

SIM Record Constants

Description Different SIM file types
Values **RIL_SIMRECORDTYPE_UNKNOWN**
An unknown file type
RIL_SIMRECORDTYPE_TRANSPARENT
A single variable lengthed record
RIL_SIMRECORDTYPE_CYCLIC
A cyclic set of records, each of the same length
RIL_SIMRECORDTYPE_LINEAR
A linear set of records, each of the same length

Every SIM has a single master record, effectively the head node

Effectively a "directory" file which is a parent of other records

Comments	None
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SIM Toolkit Terminate Constants

Description Values

SIM Toolkit session termination causes

RIL_SIMTKITTERMCAUSE_USERSTOPPEDREDIAL

User stopped redial attempts

RIL_SIMTKITTERMCAUSE_ENDOFREDIAL

End of redial period

RIL_SIMTKITTERMCAUSE_USERENDEDSSESSION

Session terminated by user

Comments None

Special Phonebook Constants

Description Values

Special phonebook index value

RIL PBINDX FIRSTAVAILABLE

User first available entry

Comments	None
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Subaddress Type Constants

Description Values

Supplementary service data status values

RIL_SUPSVCDATASTATUS_NOINFOREQUIRED

 \overline{TBD}

RIL SUPSVCDATASTATUS_FURTHERINFOREQUIRED

 \bar{TBD}

RIL SUPSVCDATASTATUS_TERMINATED

 \overline{TBD}

RIL SUPSVCDATASTATUS OTHERCLIENTRESPONDED

TBD

RIL SUPSVCDATASTATUS UNSUPPORTED

TBD

RIL SUPSVCDATASTATUS TIMEOUT

TBD

RIL_SUPSVCDATASTATUS_ERROR
TBD

Comments None

Subaddress Type Constants

Description Different subaddress types
Values **RIL_SUBADDRTYPE_NSAP**
 NSAP subaddress (X.213/ISO 8348 AD2)
 RIL_SUBADDRTYPE_USER
 User defined subaddress
Comments None

Supplemental Activation Constants

Description Supplementary service status values
Values **RIL_SVCSTAT_UNKNOWN**
 Unknown status
 RIL_SVCSTAT_DISABLED
 Service is disabled
 RIL_SVCSTAT_ENABLED
 Service is enabled
 RIL_SVCSTAT_DEFAULT
 Default status
Comments None

Supplementary Service Provisioning Constants

Description Supplementary service provisioning values
Values **RIL_SVCPROV_UNKNOWN**
 Unknown provisioning
 RIL_SVCPROV_NOTPROVISIONED
 Service isn't provisioned
 RIL_SVCPROV_PROVISIONED
 Service is provisioned
 RIL_SVCPROV_TEMPMODERESTRICTED
 Service temporary mode is restricted
 RIL_SVCPROV_TEMPMODEALLOWED
 Service temporary mode is allowed

Comments None

Telephony Service Constants

Description Values Telephony service types
RIL_SERVICE_UNKNOWN
Unknown service
RIL_SERVICE_MODEM_ASYNC
Asynchronous modem
RIL_SERVICE_MODEM_SYNC
Synchronous modem
RIL_SERVICE_PADACCESS_ASYNC
PAD Access (asynchronous)
RIL_SERVICE_PACKETACCESS_SYNC
Packet Access (synchronous)
RIL_SERVICE_VOICE
Voice
RIL_SERVICE_FAX
Fax

Comments None

Unavailable Constants

Description Values Detailed reason for support of toolkit functions
RIL_SIMTKN_MEIMPLEMENTS
The ME must implement this notification
RIL_SIMTKN_RADIOIMPLEMENTS_NONOTIFICATION
The radio will implement and not give a notification to the ME
RIL_SIMTKN_RADIOIMPLEMENTS_NOTIFICATION
The radio will implement and give a notification to the ME that it was done
RIL_SIMTKN_RADIOIMPLEMENTS_REQUESTMEINPUT
The radio will implement, but requests information from the ME first

Comments Values that variables information variables in RILSIMTOOLKITNOTIFYCAPS can take on

RIL AddCallForwarding

HRESULT RIL_AddCallForwarding(HRIL hRil, DWORD dwReason, const RILCALLFORWARDINGSETTINGS* lpSettings, DWORD dwAddressId)
 Adds a Call Forwarding rule

Parameters	<i>hRil</i>
	handle to RIL instance returned by RIL_Initialize
	<i>dwReason</i>
	forwarding reason to add Call Forwarding for (<i>RIL_FWDREASON_</i> constant)
	<i>lpSettings</i>
	settings for the new Call Forwarding rule
	<i>dwAddressId</i>
	address ID of line on which to change call forwarding settings
Comments	Asynchronous. <i>lpData</i> is <i>NULL</i> .

RIL AddPreferredOperator

HRESULT RIL_AddPreferredOperator(HRIL hRil, DWORD dwIndex, const RIOPERATORNAMES* lpOperatorNames)
 Adds a specified operator to the list of preferred operators

Parameters	<i>hRil</i>
	handle to RIL instance returned by RIL_Initialize
	<i>dwIndex</i>
	storage index to use for the added operator
	<i>lpOperatorNames</i>
	operator name
Comments	Asynchronous. <i>lpData</i> is <i>NULL</i>

RIL Answer

HRESULT RIL_Answer(HRIL hRil)
 Answers an incoming call

Parameters	<i>hRil</i>
	handle to RIL instance returned by RIL_Initialize
Comments	Asynchronous. <i>lpData</i> is <i>NULL</i> .

RIL CancelSupServiceDataSession

HRESULT RIL_CancelSupServiceDataSession(HRIL hRil)
 Cancels current supplementary service session

Parameters	<i>hRil</i>
	handle to RIL instance returned by RIL_Initialize
Comments	TBD

RIL ChangeCallBarringPassword

HRESULT RIL_ChangeCallBarringPassword(**HRIL** *hRil*, **DWORD** *dwType*, **LPCSTR** *lpwszOldPassword*, **LPCSTR** *lpwszNewPassword*)

Changes password for the specified type of call barring

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwType

type of call barring to retrieve status for (**RIL_BARRTYPE_** constant)

lpwszOldPassword

current password (no longer than **MAXLENGTH_PASSWORD** chars)

lpwszNewPassword

new password (no longer than **MAXLENGTH_PASSWORD** chars)

Comments

Asynchronous. *lpData* is **NULL**.

RIL ChangeLockingPassword

HRESULT RIL_ChangeLockingPassword(**HRIL** *hRil*, **DWORD** *dwFacility*, **LPCSTR** *lpwszOldPassword*, **LPCSTR** *lpwszNewPassword*)

Changes locking password for the specified facility

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwFacility

facility to change locking password for (**RIL_LOCKFACILITY_** constant)

lpwszOldPassword

current locking password (no longer than **MAXLENGTH_PASSWORD** chars)

lpwszNewPassword

new locking password (no longer than **MAXLENGTH_PASSWORD** chars)

Comments

Asynchronous. *lpData* is **NULL**.

RIL ClearCCBSRegistration

HRESULT RIL_ClearCCBSRegistration(**HRIL** *hRil*, **DWORD** *dwCCBSIndex*)

Clears registration for a Completion of Call to Busy Subscriber index. Activation of CCBS is used by calling **RIL_ManageCalls** using the **RIL_CALLCMD_INVOKECCBS** flag.

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwCCBSIndex

indicates which entry to clear, may be **RIL_CCBS_ALL**

Comments

Asynchronous. *lpData* is **NULL**.

RIL_Deinitialize

HRESULT RIL_Deinitialize(HRIL hRil)

Deinitializes RIL

Parameters

hRil

handle to an RIL instance returned by **RIL_Initialize**

Comments

Synchronous

RIL_DeleteGPRSContext

HRESULT RIL_DeleteGPRSContext(HRIL hRil, DWORD dwContextID)

Deletes a particular GPRS context

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwContextID

identifies which context to delete

Comments

Asynchronous. *lpData* is *NULL*.

RIL_DeleteMinimumQualityOfService

HRESULT RIL_DeleteMinimumQualityOfService(HRIL hRil, DWORD dwContextID)

Deletes the minimum quality of service profile for a context

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwContextID

identifies which profile to delete

Comments

Asynchronous. *lpData* is *NULL*.

RIL_DeleteMsg

HRESULT RIL_DeleteMsg(HRIL hRil, DWORD dwIndex)

Deletes a message from the current storage location

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwIndex

index of the message to be deleted

Comments

Asynchronous. *lpData* is *NULL*.

RIL DeletePhonebookEntry

HRESULT RIL_DeletePhonebookEntry(HRIL *hRil*, DWORD *dwIndex*)

Deletes a phonebook entry from the current storage location

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwIndex

index of the entry to delete

Comments

Asynchronous. *lpData* is *NULL*.

RIL DeleteRequestedQualityOfService

HRESULT RIL_DeleteRequestedQualityOfService(HRIL *hRil*, DWORD

dwContextID)

Deletes the requested quality of service profile for a context

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwContextID

identifies which profile to delete

Comments

Asynchronous. *lpData* is *NULL*.

RIL DevSpecific

HRESULT RIL_DevSpecific(HRIL *hRil*, const BYTE* *lpbParams*, DWORD *dwSize*)

Performs an implementation-specific operation

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpbParams

parameters for the operation to be performed

dwSize

size of the data pointed to by *lpParams* in bytes

Comments

Asynchronous. *lpData* points to an array of **BYTES**.

RIL Dial

HRESULT RIL_Dial(HRIL *hRil*, LPCSTR *lpszAddress*, DWORD *dwType*, DWORD

dwOptions, DWORD *dwAddressId*)

Dials a specified address

Parameters	<i>hRil</i> handle to RIL instance returned by RIL_Initialize
	<i>lpszAddress</i> address to dial (no longer than <i>MAXLENGTH_ADDRESS</i> chars)
	<i>dwType</i> type of the call to establish (<i>RIL_CALLTYPE_</i> constant)
	<i>dwOptions</i> dialing options (any combination of <i>RIL_DIALOPT_</i> constants)
	<i>dwAddressId</i> address ID of the line on which to dial out
Comments	Asynchronous. <i>lpData</i> is <i>NULL</i> .

RIL_DisableNotifications

HRESULT RIL_DisableNotifications(HRIL *hRil*, **DWORD *dwNotificationClasses*)**
Disables classes of notifications for this client

Parameters	<i>hRil</i> handle to RIL instance returned by RIL_Initialize
	<i>dwNotificationClasses</i> classes of notifications to disable
Comments	Synchronous

RIL_EnableNotifications

HRESULT RIL_EnableNotifications(HRIL *hRil*, **DWORD *dwNotificationClasses*)**
Enables additional classes of notifications for this client

Parameters	<i>hRil</i> handle to RIL instance returned by RIL_Initialize
	<i>dwNotificationClasses</i> classes of notifications to enable
Comments	Synchronous

RIL_EnterGPRSDataMode

HRESULT RIL_EnterGPRSDataMode(HRIL *hRil*, **const RILENTERGPRSDATAMODE* *lpEnterGprsDataMode*)**
Enters into GPRS data state

Parameters	<i>hRil</i> handle to RIL instance returned by RIL_Initialize
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lpEnterGprsDataMode
points to a **RILENTERGPRSDATAMODE** structure

Comments Asynchronous. *lpData* if *NULL*.

RIL FetchSimToolkitCmd

HRESULT RIL_FetchSimToolkitCmd(HRIL hRil)
Fetches a SIM Toolkit command from the SIM

Parameters *hRil*
handle to RIL instance returned by **RIL_Initialize**

Comments Asynchronous. *lpData* points to an array of **BYTE**s containing a fetched command.

RIL GetAudioDevices

HRESULT RIL_GetAudioDevices(HRIL hRil)
Retrieves currently used transmit and receive audio devices

Parameters *hRil*
handle to RIL instance returned by **RIL_Initialize**

Comments Asynchronous. *lpData* points to an **RILAUDIODEVICEINFO** structure.

RIL GetAudioGain

HRESULT RIL_GetAudioGain(HRIL hRil)
Retrieves audio gain information

Parameters *hRil*
handle to RIL instance returned by **RIL_Initialize**

Comments Asynchronous. *lpData* points to an **RILGAININFO** structure.

RIL GetAudioMuting

HRESULT RIL_GetAudioMuting(HRIL hRil)
Determines whether the input audio device is muted

Parameters *hRil*
handle to RIL instance returned by **RIL_Initialize**

Comments Asynchronous. *lpData* points to a **BOOL**.

RIL_GetBearerServiceOptions

HRESULT RIL_GetBearerServiceOptions(HRIL hRil)

Retrieves currently set data bearer service options

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an **RILBEARERSVCINFO** structure.

RIL_GetCallBarringStatus

HRESULT RIL_GetCallBarringStatus(HRIL hRil, DWORD dwType, DWORD dwInfoClass, LPCSTR lpszPassword)

Retrieves status of the specified type of call barring

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwType

type of call barring to retrieve status for (**RIL_BARRTYPE_** constant)

dwInfoClass

information class to retrieve barring status for (**RIL_INFOCLASS_** constant)

lpszPassword

password to retrieve barring status (can be **NULL** if password isn't required; no longer than **MAXLENGTH_PASSWORD** chars)

Comments

Asynchronous. *lpData* points to a **DWORD** containing a **RIL_BARRINGSTATUS** constant.

RIL_GetCallerIdSettings

HRESULT RIL_GetCallerIdSettings(HRIL hRil)

Retrieves the current CallerID settings

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an **RILCALLERIDSETTINGS** structure.

RIL_GetCallForwardingSettings

HRESULT RIL_GetCallForwardingSettings(HRIL hRil, DWORD dwReason, DWORD dwAddressId)

Retrieves current Call Forwarding rules

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwReason

forwarding reason to retrieve the settings for (*RIL_FWDREASON_* constant)

dwAddressId

address ID of line on which to get call forwarding settings

Comments

Asynchronous. *lpData* points to an array of **RILCALLFORWARDINGSETTINGS** structure.

RIL_GetCallList

HRESULT RIL_GetCallList(HRIL hRil)

Retrieves the list of active, held, and waiting calls

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an array of **RILCALLINFO** structures.

RIL_GetCallWaitingSettings

HRESULT RIL_GetCallWaitingSettings(HRIL hRil)

Retrieves info classes that Call Waiting is currently enabled for

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to **DWORD** containing a combination of *RIL_INFOCLASS_* constants.

RIL_GetCCBSStatus

HRESULT RIL_GetCCBSStatus(HRIL hRil, DWORD dwCCBSIndex)

Retrieves the status for a Completion of Call to Busy Subscriber index.

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwCCBSIndex

indicates which entry to query

Comments

Asynchronous. If active, *lpData* points to an array of **chars** indicating the phone number for which CCBS is active. If CCBS is not active for that entry, *lpData* is **NULL**.

RIL_GetCellTowerInfo

HRESULT RIL_GetCellTowerInfo(HRIL hRil)

Retrieves information about the cell tower currently used by the phone

RIL_GetDataCompression

HRESULT RIL_GetDataCompression(HRIL hRil)

Retrieves data compression options

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an **RILDATACOMPINFO** structure.

RIL_GetDevCaps

HRESULT RIL_GetDevCaps(HRIL hRil, DWORD dwCapsType)

Retrieves specified device capabilities

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwCapsType

type of caps class to retrieve

Comments

Asynchronous.

dwCapsType (**RIL_CAPSTYPE_**) *lpData*

* **_DIAL** points to an **RILCAPSDIAL** structure

* **_DTMFDURATIONRANGE** points to an **RILRANGE** structure (values in milliseconds)

* **_CALLMGTCMDS** points to **DWORD** containing a combination of **RIL_CAPS_CALLCMD_** constants

* **_BEARERSERVICE** points to an **RILCAPSBEARERSVC** structure

* **_RLP** points to an array of **RILAPSRLP** structures

* **_EQUIPMENTSTATES** points to **DWORD** containing a combination of **RIL_CAPS_EQSTATE_** constants

* **_PBSTORELOCATIONS** points to **DWORD** containing a combination of **RIL_CAPS_PBLOC_** constants

* **_PBINDEXRANGE** points to an **RILRANGE** structure

* **_PBENTRYTEXTLENGTH** points to a **DWORD**

* **_MSGSERVICETYPES** points to **DWORD** containing a combination of **RIL_CAPS_MSGSVCTYPE_** constants

* **_MSGMEMORYLOCATIONS** points to an **RILCAPSMGSMEMORYLOCATIONS** structure

* **_BROADCASTMSGLANGS** points to **DWORD** containing a combination of **RIL_CAPS_DCSSLANG_** constants

* **_MSGCONFIGINDEXRANGE** points to an **RILRANGE** structure

* **_MSGSTATUSVALUES** points to **DWORD** containing a combination of **RIL_CAPS_MSGSTATUS_** constants

* **_PREFOPINDEXRANGE** points to an **RILRANGE** structure

* **_LOCKFACILITIES** points to **DWORD** containing a combination of **RIL_CAPS_LOCKFACILITY_** constants

* **_LOCKINGPWDLENGTHS** points to an array of **RILCAPSLOCKINGPWDLENGTH** structures
 * **_BARRYPES** points to **DWORD** containing a combination of **RIL_CAPS_BARRYPE** constants
 * **_BARRINGPWDLENGTHS** points to an array of **RILCAPSBARRINGPWDLENGTH** structures
 * **_FORWARDINGREASONS** points to **DWORD** containing a combination of **RIL_CAPS_FWDREASON** constants
 * **_SIMTOOLKITNOTIFICATIONS** points to a **TBD SIMTOOLKIT** structure
 * **_INFOCLASSES** points to **DWORD** containing a combination of **RIL_CAPS_INFOCLASS** constants
 * **_HSCSD** points to an **RILCAPSHSCSD** structure
 * **_GPRS** points to an **RILCAPSGPRS** structure

RIL_GetDialedIdSettings

HRESULT RIL_GetDialedIdSettings(HRIL hRil)

Retrieves the current DialedID settings

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an **RILDIALEDIDSETTINGS** structure.

RIL_GetEquipmentInfo

HRESULT RIL_GetEquipmentInfo(HRIL hRil)

Retrieves manufacturer equipment information

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an **RILEQUIPMENTINFO** structure.

RIL_GetEquipmentState

HRESULT RIL_GetEquipmentState(HRIL hRil)

Retrieves currently set equipment state

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an **RILEQUIPMENTSTATE** structure.

RIL_GetErrorCorrection

HRESULT RIL_GetErrorCorrection(HRIL hRil)

Retrieves error correction options

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an **RILErrorCorrectionInfo** structure.

RIL_GetGPRSAddress

HRESULT RIL_GetGPRSAddress(HRIL hRil, DWORD dwContextID)

Gets the PDP address for a particular context

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwContextID

identifies the context

Comments

Asynchronous. *lpData* points to an array of **WCHAR** values indicating the address.

RIL_GetGPRSAttached

HRESULT RIL_GetGPRSAttached(HRIL hRil)

Gets the GPRS attach state

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to a **BOOL** indicating attach state.

RIL_GetGPRSClass

HRESULT RIL_GetGPRSClass(HRIL hRil)

Retrieves the current GPRS class

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to a **RIL_GPRSClass** constant.

RIL_GetGPRSContextActivatedList

HRESULT RIL_GetGPRSContextActivatedList(HRIL hRil)

Gets the GPRS activation state for all contexts

Parameters *hRil*
 handle to RIL instance returned by **RIL_Initialize**

Comments Asynchronous. *lpData* points to a **RILGPRSCONTEXTACTIVATED** indicating activation state.

RIL_GetGPRSContextList

HRESULT RIL_GetGPRSContextList(HRIL hRil)
 Retrieves a list GPRS contexts

Parameters *hRil*
 handle to RIL instance returned by **RIL_Initialize**

Comments Asynchronous. *lpData* points to a **RILGPRSCONTEXT** structure.

RIL_GetGPRSRegistrationStatus

HRESULT RIL_GetGPRSRegistrationStatus(HRIL hRil)
 Retrieves the current GPRS registration status

Parameters *hRil*
 handle to RIL instance returned by **RIL_Initialize**

Comments Asynchronous. *lpData* points to a **RIL_REGSTAT_** constant.

RIL_GetHideConnectedIdSettings

HRESULT RIL_GetHideConnectedIdSettings(HRIL hRil)
 Retrieves the current HideConnectedID settings

Parameters *hRil*
 handle to RIL instance returned by **RIL_Initialize**

Comments Asynchronous. *lpData* points to an **RILHIDECONNECTEDIDSETTINGS** structure.

RIL_GetHideIdSettings

HRESULT RIL_GetHideIdSettings(HRIL hRil)
 Retrieves the current HideID settings

Parameters *hRil*
 handle to RIL instance returned by **RIL_Initialize**

Comments Asynchronous. *lpData* points to an **RILHIDEIDSETTINGS** structure.

RIL_GetHSCSDCallSettings

HRESULT RIL_GetHSCSDCallSettings(HRIL hRil)

Retrieves High Speed Circuit Switched Data options

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an **RILCALLHSCSDINFO** structure.

RIL_GetHSCSDOptions

HRESULT RIL_GetHSCSDOptions(HRIL hRil)

Retrieves High Speed Circuit Switched Data options

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an **RILHSCSDINFO** structure.

RIL_GetLineStatus

HRESULT RIL_GetLineStatus(HRIL hRil)

Retrieves the phone line status

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to **DWORD** containing **RIL_LINESTAT_** constant.

RIL_GetLockingStatus

HRESULT RIL_GetLockingStatus(HRIL hRil, DWORD dwFacility, LPCSTR lpszPassword)

Retrieves locking status for the specified facility

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwFacility

facility to retrieve locking status for (**RIL_LOCKFACILITY_** constant)

lpszPassword

password to retrieve locking status (can be **NULL** if password isn't required; no longer than **MAXLENGTH_PASSWORD** chars)

Comments

Asynchronous. *lpData* points to a **DWORD** containing a **RIL_LOCKINGSTATUS_** constant.

RIL_GetMinimumQualityOfServiceList

HRESULT RIL_GetMinimumQualityOfServiceList(HRIL hRil)

Gets the minimum quality of service profile for all contexts

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to a **RILGPRSQOSPROFILE** structure.

RIL_GetMOSMSService

HRESULT RIL_GetMOSMSService(HRIL hRil)

Retrieves the preferred SMS service option for mobile originated messages

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to a **RIL_MOSMSSERVICE_** constant.

RIL_GetMsgConfig

HRESULT RIL_GetMsgConfig(HRIL hRil)

Gets currently set messaging configuration

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an **RILMSGCONFIG** structure.

RIL_GetMsgServiceOptions

HRESULT RIL_GetMsgServiceOptions(HRIL hRil)

Gets currently set messaging service options

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an **RILMSGSERVICEINFO** structure.

RIL_GetOperatorList

HRESULT RIL_GetOperatorList(HRIL hRil)

Retrieves the list of available operators

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments	Asynchronous. <i>lpData</i> points to an array of RIOPERATORINFO structures.
<hr/>	
<u>RIL_GetPhonebookOptions</u>	
HRESULT RIL_GetPhonebookOptions(HRIL hRil) Retrieves currently set phonebook options	
Parameters	<i>hRil</i> handle to RIL instance returned by RIL_Initialize
Comments	Asynchronous. <i>lpData</i> points to an RILPHONEBOOKINFO structure.
<hr/>	
<u>RIL_GetPhoneLockedState</u>	
HRESULT RIL_GetPhoneLockedState(HRIL hRil) Retrieves current locked state of the phone	
Parameters	<i>hRil</i> handle to RIL instance returned by RIL_Initialize
Comments	Asynchronous. <i>lpData</i> points to a DWORD containing a RIL_LOCKEDSTATE_ constant
<hr/>	
<u>RIL_GetPreferredOperatorList</u>	
HRESULT RIL_GetPreferredOperatorList(HRIL hRil, DWORD dwFormat) Retrieves the list of preferred operators	
Parameters	<i>hRil</i> handle to RIL instance returned by RIL_Initialize <i>dwFormat</i> format to use for the operator names in the list
Comments	Asynchronous. <i>lpData</i> points to an array of RIOPERATORINFO structures.
<hr/>	
<u>RIL_GetRadioPresence</u>	
HRESULT RIL_GetRadioPresence(HRIL hRIL, DWORD* dwRadioPresence) Proxy API to determine if the Radio is present or Not (Is the RIL driver Loaded?)	
Parameters	<i>hRIL</i> handle to RIL instance returned by RIL_Initialize <i>dwRadioPresence</i> pointer to a DWORD (ouput param contains values from RIL_RADIOPRESENCE_*)
Comments	Synchronous

RIL_GetRegistrationStatus

HRESULT RIL_GetRegistrationStatus(HRIL hRil)

Retrieves the current phone registration status

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to a **RIL_REGSTAT_** constant.

RIL_GetRequestedQualityOfServiceList

HRESULT RIL_GetRequestedQualityOfServiceList(HRIL hRil)

Gets the requested quality of service profile for all contexts

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to a **RILGPRSQOSPROFILE** structure.

RIL_GetRLPOptions

HRESULT RIL_GetRLPOptions(HRIL hRil)

Retrieves currently set Radio Link Protocol options

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an **RILRLPINFO** structure.

RIL_GetSerialPortHandle

HRESULT RIL_GetSerialPortHandle(HRIL hRil, HANDLE* lphSerial)

Retrieves a serial port handle to be used for data communications

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lphSerial

pointer to the serial port handle

Comments

Synchronous. Client is responsible for closing the handle returned in *lphSerial*.

RIL_GetSerialPortStatistics

HRESULT RIL_GetSerialPortStatistics(HRIL hRil, RILSERIALPORTSTATS* lphSerialStats)

Retrieves a serial port handle statistics

Parameters

hRil
handle to RIL instance returned by **RIL_Initialize**

lpSerialPortStats
pointer to the statistics structure

Comments Synchronous

RIL_GetSignalQuality

HRESULT RIL_GetSignalQuality(HRIL hRil)
Retrieves information about the received signal quality

Parameters

hRil
handle to RIL instance returned by **RIL_Initialize**

Comments Asynchronous. *lpData* points to a **RILSIGNALQUALITY** structure.

RIL_GetSimRecordStatus

HRESULT RIL_GetSimRecordStatus(HRIL hRil, DWORD dwFileID)
Retrieves SIM Record Status

Parameters

hRil
handle to RIL instance returned by **RIL_Initialize**

dwFileID
address of the file to read

Comments Asynchronous. *lpData* points to **RILSIMRECORDSTATUS**

RIL_GetSimToolkitProfile

HRESULT RIL_GetSimToolkitProfile(HRIL hRil)
Retrieves SIM Toolkit terminal profile

Parameters

hRil
handle to RIL instance returned by **RIL_Initialize**

Comments Asynchronous. *lpData* points to an array of **BYTES**.

RIL_GetSubscriberNumbers

HRESULT RIL_GetSubscriberNumbers(HRIL hRil)
Restrieves information about subscriber numbers

Parameters

hRil
handle to RIL instance returned by **RIL_Initialize**

Comments Asynchronous. *lpData* points to an array of **RILSUBSCRIBERINFO** structures.

RIL_GetSystemTime

HRESULT RIL_GetSystemTime(HRIL hRil)

Retrieves the systemtime from the network

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to a **SYSTEMTIME** structure. This feature is currently not used in Stinger and is untested.

RIL_GetUserIdentity

HRESULT RIL_GetUserIdentity(HRIL hRil)

Retrieves International Mobile Subscriber Identity of the phone user

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* points to an array of **chars**

RIL_GPRSAnswer

HRESULT RIL_GPRSAnswer(HRIL hRil)

Answers an incoming GPRS activation request

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* is **NULL**.

RIL_Hangup

HRESULT RIL_Hangup(HRIL hRil)

Hangs up all calls currently in progress

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* is **NULL**.

RIL Initialize

HRESULT RIL_Initialize(DWORD dwIndex, RILRESULTCALLBACK pfnResult, RILNOTIFYCALLBACK pfnNotify, DWORD dwNotificationClasses, DWORD dwParam, HRIL* lphRil)

Initializes RIL for use by this client

Parameters

dwIndex

index of the RIL port to use (e.g., 1 for RIL1:)

pfnResult

function result callback

pfnNotify

notification callback

dwNotificationClasses

classes of notifications to be enabled for this client

dwParam

custom parameter passed to result and notification callbacks

lphRil

returned handle to RIL instance

Comments

Synchronous RIL only supports single threaded RIL handles. The RIL validates the application's RIL handle before using it. No application can use/close a RIL handle that it does not own.

RIL InitializeEmergency

HRESULT RIL_InitializeEmergency(DWORD dwIndex, RILRESULTCALLBACK pfnResult, RILNOTIFYCALLBACK pfnNotify, DWORD dwNotificationClasses, DWORD dwParam, HRIL* lphRil)

Initializes RIL for use by this emergency call module

Parameters

dwIndex

index of the RIL port to use (e.g., 1 for RIL1:)

pfnResult

function result callback

pfnNotify

notification callback

dwNotificationClasses

classes of notifications to be enabled for this client

dwParam

custom parameter passed to result and notification callbacks

lphRil

returned handle to RIL instance

Comments

Synchronous

RIL ManageCalls

HRESULT RIL_ManageCalls(HRIL hRil, DWORD dwCommand, DWORD dwID)

Modifies the state of active, held, and waiting calls

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwCommand

call modification command to be performed (**RIL_CALLCMD_** constant)

dwID

ID of the call to be modified (only for **RIL_CALLCMD_RELEASECALL** and **RIL_CALLCMD_HOLDALLBUTONE**)

Comments

Asynchronous. *lpData* is **NULL**.

RIL ReadMsg

HRESULT RIL_ReadMsg(HRIL hRil, DWORD dwIndex)

Reads a message from the current storage location

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwIndex

index of the message to be read

Comments

Asynchronous. *lpData* points to an **RILMESSAGEINFO** structure.

RIL ReadPhonebookEntries

HRESULT RIL_ReadPhonebookEntries(HRIL hRil, DWORD dwStartIndex, DWORD dwEndIndex)

Reads phonebook entries from the specified range of indices of the current storage location

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwStartIndex

starting index of the range

dwEndIndex

ending index of the range

Comments

Asynchronous. *lpData* points to an array of **RILPHONEBOOKENTRY** structures.

RIL_RegisterOnNetwork

HRESULT RIL_RegisterOnNetwork(HRIL hRil, DWORD dwMode, const RIOPERATORNAMES* lpOperatorNames)

Registers the ME with a network operator

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwMode

operator selection mode (**RIL_OPSELMODE_** constant)

lpOperatorNames

operator to be selected (can be *NULL* if *dwMode* is **RIL_OPSELMODE_AUTOMATIC**)

Comments

Asynchronous. *lpData* is *NULL*.

RIL_RemoveCallForwarding

HRESULT RIL_RemoveCallForwarding(HRIL hRil, DWORD dwReason, DWORD dwInfoClasses, DWORD dwAddressId)

Removes a Call Forwarding rule

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwReason

forwarding reason to remove Call Forwarding for (**RIL_FWDREASON_** constant)

dwInfoClasses

information classes to remove Call Forwarding for (combination of **RIL_INFOCLASS_** constants)

dwAddressId

address ID of line on which to change call forwarding settings

Comments

Asynchronous. *lpData* is *NULL*.

RIL_RemovePreferredOperator

HRESULT RIL_RemovePreferredOperator(HRIL hRil, DWORD dwIndex)

Removes a specified operator from the list of preferred operators

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwIndex

storage index of the preferred operator to remove

Comments

Asynchronous. *lpData* is *NULL*.

RIL RestoreMsgConfig

HRESULT RIL_RestoreMsgConfig(HRIL hRil, DWORD dwIndex)

Restores a previously saved messaging configuration

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwIndex

index of the configuration to restore

Comments

Asynchronous. *lpData* is *NULL*.

RIL SaveMsgConfig

HRESULT RIL_SaveMsgConfig(HRIL hRil, DWORD dwIndex)

Saves currently set messaging configuration

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwIndex

index to be assigned to the stored configuration

Comments

Asynchronous. *lpData* is *NULL*.

RIL SendDTMF

HRESULT RIL_SendDTMF(HRIL hRil, LPCSTR lpszChars, DWORD dwDuration)

Sends DTMF tones across an established voice call

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpszChars

alphanumeric string representing DTMF tones to be sent (0-9, A-D, *, #)

dwDuration

new DTMF tone duration in milliseconds (*RIL_DTMFDURATION_DEFAULT* corresponds to the manufacturer's default value)

Comments

Asynchronous. *lpData* is *NULL*. Function does not return until DTMF tone has completed. BUGBUG This does not allow press and hold DTMF functionality.

RIL SendMsg

HRESULT RIL_SendMsg(HRIL hRil, const RILMESSAGE* lpMessage, DWORD dwOptions)

Sends a message

Parameters	<i>hRil</i> handle to RIL instance returned by RIL_Initialize
	<i>lpMessage</i> message to be sent
	<i>dwOptions</i> options (any combination of RIL_SENDOPT_ constants)
Comments	Asynchronous. <i>lpData</i> points to a DWORD containing the reference number of the sent message.

RIL_SendMsgAcknowledgement

HRESULT RIL_SendMsgAcknowledgement(HRIL hRil, BOOL fSuccess)
Sends an message acknowledgement

Parameters	<i>hRil</i> handle to RIL instance returned by RIL_Initialize
	<i>fSuccess</i> TRUE if success acknowledgment is to be sent; FALSE otherwise
Comments	Asynchronous. <i>lpData</i> is NULL . On Phase 2 mobiles, the radio automatically sends SMS message ACKs. But in Phase 2+, the MMI is responsible for these ACKs, hence this function.

RIL_SendRestrictedSimCmd

HRESULT RIL_SendRestrictedSimCmd(HRIL hRil, DWORD dwCommand, const RILSIMCMDPARAMETERS* lpParameters, const BYTE* lpbData, DWORD dwSize)
Sends a specified restricted command to the SIM

Parameters	<i>hRil</i> handle to RIL instance returned by RIL_Initialize
	<i>dwCommand</i> restricted command to be sent to the SIM (RIL_SIMCMD_ constant)
	<i>lpParameters</i> Parameters for the command to be sent (can be NULL if parameters aren't required)
	<i>lpbData</i> Data to be written to the SIM (can be NULL if data isn't required)
	<i>dwSize</i> Size of the data pointed to by <i>lpbData</i> in bytes
Comments	Asynchronous. <i>lpData</i> points to an RILSIMRESPONSE structure.

RIL_SendSimCmd

HRESULT RIL_SendSimCmd(HRIL hRil, const BYTE* lpbCommand, DWORD dwSize)

Sends a specified command to the SIM

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpbCommand

command to be sent to the SIM

dwSize

size of the data pointed to by *lpbCommand* in bytes

Comments

Asynchronous. *lpData* points to an array of **BYTE**s.

RIL_SendSimToolkitCmdResponse

HRESULT RIL_SendSimToolkitCmdResponse(HRIL hRil, const BYTE* lpbResponse, DWORD dwSize)

Sends a response to an executed SIM Toolkit command

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpbResponse

response to be sent

dwSize

size of the data pointed to by *lpbResponse* in bytes

Comments

Asynchronous. *lpData* is *NULL*.

RIL_SendSimToolkitEnvelopeCmd

HRESULT RIL_SendSimToolkitEnvelopeCmd(HRIL hRil, const BYTE* lpbCommand, DWORD dwSize)

Sends a SIM Toolkit envelope command

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpbCommand

SIM Toolkit envelope command to be sent

dwSize

size of the data pointed to by *lpbCommand* in bytes

Comments

Asynchronous. *lpData* points to an array of **BYTE**s containing a response to the sent command.

RIL_SendStoredMsg

HRESULT RIL_SendStoredMsg(HRIL hRil, DWORD dwIndex, DWORD dwOptions)

Sends a message from the current storage location

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwIndex

index of the message to be sent

dwOptions

options (any combination of **RIL_SENDOPT_** constants)

Comments

Asynchronous. *lpData* points to a **DWORD** containing the reference number of the sent message. This feature is not used in Stinger and is untested.

RIL_SendSupServiceData

HRESULT RIL_SendSupServiceData(HRIL hRil, const BYTE* lpbData, DWORD dwSize)

Sends supplementary service (USSD) data

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpbData

data to be sent

dwSize

size of the data pointed to by *lpbData* in bytes

Comments

TBD

RIL_SetAudioDevices

HRESULT RIL_SetAudioDevices(HRIL hRil, const RILAUDIODEVICEINFO* lpAudioDeviceInfo)

Sets currently used transmit and receive audio devices

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpAudioDeviceInfo

audio devices to set

Comments

Asynchronous. *lpData* is **NULL**.

RIL_SetAudioGain

HRESULT RIL_SetAudioGain(HRIL hRil, const RILGAININFO* lpGainInfo)

Sets audio gain information

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpGainInfo

audio gain information to be sent

Comments

Asynchronous. *lpData* is *NULL*.

RIL_SetAudioMuting

HRESULT RIL_SetAudioMuting(HRIL hRil, BOOL fEnable)

Mutes or un-mutes the input audio device

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

fEnable

TRUE if input audio device is to be muted; FALSE otherwise

Comments

Asynchronous. *lpData* is *NULL*.

RIL_SetBearerServiceOptions

HRESULT RIL_SetBearerServiceOptions(HRIL hRil, const RILBEARERSVCINFO*

lpBearerServiceInfo)

Sets data bearer service options

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpBearerServiceInfo

data bearer service options to set

Comments

Asynchronous. *lpData* is *NULL*.

RIL_SetCallBarringStatus

HRESULT RIL_SetCallBarringStatus(HRIL hRil, DWORD dwType, DWORD

dwInfoClass, LPCSTR *lpzPassword*, DWORD *dwStatus*)

Enables or disables the specified type of call barring

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwType
type of call barring to enable/disable (*RIL_BARRTYPE_* constant)

dwInfoClass
information class to enable/disable call barring for (*RIL_INFOCLASS_* constant)

lpzPassword
password to enable/disable call barring (can be *NULL* if password isn't required; no longer than *MAXLENGTH_PASSWORD* chars)

dwStatus
status to be set (*RIL_BARRINGSTATUS_* constant)

Comments Asynchronous. *lpData* is *NULL*.

RIL_SetCallerIdStatus

HRESULT RIL_SetCallerIdStatus(HRIL hRil, DWORD dwStatus)

Sets the current CallerID status

Parameters

hRil
handle to RIL instance returned by **RIL_Initialize**

dwStatus
status to be set (*RIL_SVCSTAT_* constant)

Comments Asynchronous. *lpData* is *NULL*.

RIL_SetCallForwardingStatus

HRESULT RIL_SetCallForwardingStatus(HRIL hRil, DWORD dwReason, DWORD dwInfoClasses, DWORD dwStatus, DWORD dwAddressId)

Enables or disables the specified Call Forwarding rule

Parameters

hRil
handle to RIL instance returned by **RIL_Initialize**

dwReason
forwarding reason to enable/disable Call Forwarding for (*RIL_FWDREASON_* constant)

dwInfoClasses
information classes to enable/disable Call Forwarding for (combination of *RIL_INFOCLASS_* constants)

dwStatus
status to be set (*RIL_SVCSTAT_* constant)

dwAddressId
address ID of line on which to change call forwarding settings

Comments Asynchronous. *lpData* is *NULL*.

RIL SetCallWaitingStatus

HRESULT RIL_SetCallWaitingStatus(HRIL hRil, DWORD dwInfoClasses, DWORD dwStatus)

Enables or disables Call Waiting for the specified info class

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwInfoClasses

information classes to enable/disable Call Waiting for

dwStatus

status to be set (*RIL_SVCSTAT_* constant)

Comments

Asynchronous. *lpData* is *NULL*.

RIL SetClosedGroupSettings

HRESULT RIL_SetClosedGroupSettings(HRIL hRil, const RILCLOSEDGROUPSETTINGS* lpSettings)

Sets the Closed User Group settings

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpSettings

settings to be set

Comments

Asynchronous. *lpData* is *NULL*.

RIL SetCostInfo

HRESULT RIL_SetCostInfo(HRIL hRil, const RILCOSTINFO* lpCostInfo, LPCSTR lpszPassword)

Sets advice-of-charge settings

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpCostInfo

advice-of-charge settings to set

lpszPassword

password required to set advice-of-charge settings

Comments

Asynchronous. *lpData* points to a **RILCOSTINFO** structure. This feature is not used in Stinger and is untested.

RIL_SetCurrentAddressId

HRESULT RIL_SetCurrentAddressId(HRIL hRil, DWORD dwAddressId)

Sets the current address identifier (see RILSUBSCRIBERINFO)

Parameters
hRil
 handle to RIL instance returned by **RIL_Initialize**
dwAddressId
 identifies the new addressID to use

Comments
 Asynchronous. *lpData* is *NULL*.

RIL_SetDataCompression

HRESULT RIL_SetDataCompression(HRIL hRil, const RILDATACOMPINFO*

lpDataCompInfo)

Sets data compression options

Parameters
hRil
 handle to RIL instance returned by **RIL_Initialize**
lpDataCompInfo
 data compression options to set

Comments
 Asynchronous. *lpData* is *NULL*.

RIL_SetDialIdStatus

HRESULT RIL_SetDialIdStatus(HRIL hRil, DWORD dwStatus)

Sets the current DialedID settings

Parameters
hRil
 handle to RIL instance returned by **RIL_Initialize**
dwStatus
 status to be set (*RIL_SVCSTAT_* constant)

Comments
 Asynchronous. *lpData* is *NULL*.

RIL_SetDTMFMonitoring

HRESULT RIL_SetDTMFMonitoring(HRIL hRil, BOOL fEnable)

Detects DTMF tones from an established voice call

Parameters
hRil
 handle to RIL instance returned by **RIL_Initialize**
fEnable
 TRUE to initiate DTMF monitoring; FALSE to cancel

Comments Asynchronous. *lpData* is *NULL*.

RIL_SetEquipmentState

HRESULT RIL_SetEquipmentState(HRIL hRil, DWORD dwEquipmentState)
Sets the equipment to the specified state

Parameters
hRil
handle to RIL instance returned by **RIL_Initialize**
dwEquipmentState
equipment state to set (*RIL_EQSTATE_* constant)

Comments Asynchronous. *lpData* is *NULL*.

RIL_SetErrorCorrection

HRESULT RIL_SetErrorCorrection(HRIL hRil, const RILERRORCORRECTIONINFO* lpErrorCorrectionInfo)
Set error correction options

Parameters
hRil
handle to RIL instance returned by **RIL_Initialize**
lpErrorCorrectionInfo
error correction options to set

Comments Asynchronous. *lpData* is *NULL*.

RIL_SetGPRSAttached

HRESULT RIL_SetGPRSAttached(HRIL hRil, BOOL fAttached)
Sets the GPRS attach state

Parameters
hRil
handle to RIL instance returned by **RIL_Initialize**
fAttached
TRUE: attached, FALSE: detached

Comments Asynchronous. *lpData* is *NULL*.

RIL_SetGPRSClass

HRESULT RIL_SetGPRSClass(HRIL hRil, DWORD dwClass)
Sets the current GPRS class

Parameters
hRil
handle to RIL instance returned by **RIL_Initialize**

dwClass
a RIL_GPRSCLASS_* constant

Comments Asynchronous. *lpData* is *NULL*

RIL_SetGPRSContext

HRESULT RIL_SetGPRSContext(HRIL *hRil*, const RILGPRSCONTEXT*
lpGprsContext)

Sets a particular GPRS context

Parameters *hRil*
handle to RIL instance returned by **RIL_Initialize**

lpGprsContext
points to a **RILGPRSCONTEXT** structure

Comments Asynchronous. *lpData* is *NULL*.

RIL_SetGPRSContextActivated

HRESULT RIL_SetGPRSContextActivated(HRIL *hRil*, **DWORD** *dwContextID*,
BOOL *fContextActivation*)

Sets the GPRS activation state for a context

Parameters *hRil*
handle to RIL instance returned by **RIL_Initialize**
dwContextID
identifies the context

fContextActivation
TRUE: activated, FALSE: deactivated

Comments Asynchronous. *lpData* is *NULL*.

RIL_SetHideConnectedIdStatus

HRESULT RIL_SetHideConnectedIdStatus(HRIL *hRil*, **DWORD** *dwStatus*)

Sets the current HideConnectedID settings

Parameters *hRil*
handle to RIL instance returned by **RIL_Initialize**

dwStatus
status to be set (*RIL_SVCSTAT_* constant)

Comments Asynchronous. *lpData* is *NULL*.

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RIL SetHideIdStatus

HRESULT RIL_SetHideIdStatus(HRIL *hRil*, **DWORD** *dwStatus*)

Enables or disables HideID service

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwStatus

status to be set (*RIL_SVCSTAT_* constant)

Comments

Asynchronous. *lpData* is *NULL*.

RIL SetHSCSDOptions

HRESULT RIL_SetHSCSDOptions(HRIL *hRil*, **const RILHSCSDINFO*** *lpHscsdInfo*)

Sets High Speed Circuit Switched Data options

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpHscsdInfo

High Speed Circuit Switched Data options to set

Comments

Asynchronous. *lpData* is *NULL*.

RIL SetLockingStatus

HRESULT RIL_SetLockingStatus(HRIL *hRil*, **DWORD** *dwFacility*, **LPCSTR**

lpszPassword, **DWORD** *dwStatus*)

Enables or disables locking status for the specified facility

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwFacility

facility to enable/disable locking for (*RIL_LOCKFACILITY_* constant)

lpszPassword

password to enable/disable locking (can be *NULL* if password isn't required; no longer than *MAXLENGTH_PASSWORD* chars)

dwStatus

status to be set (*RIL_LOCKINGSTATUS_* constant)

Comments

Asynchronous. *lpData* is *NULL*.

RIL SetMinimumQualityOfService

HRESULT RIL_SetMinimumQualityOfService(HRIL *hRil*, const RILGPRSQOSPROFILE* *lpGprsQosProfile*)

Sets the minimum quality of service profile for a context

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpGprsQosProfile

points to a **RILGPRSQOSPROFILE** structure

Comments

Asynchronous. *lpData* is *NULL*.

RIL SetMOSMSService

HRESULT RIL_SetMOSMSService(HRIL *hRil*, DWORD *dwMoSmsService*)

Sets the preferred SMS service option for mobile originated messages

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwMoSmsService

a **RIL_MOSMSSERVICE_*** constant

Comments

Asynchronous. *lpData* is *NULL*

RIL SetMsgConfig

HRESULT RIL_SetMsgConfig(HRIL *hRil*, const RILMSGCONFIG* *lpMsgConfigInfo*)

Sets messaging configuration

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpMsgConfigInfo

messaging configuration to be set

Comments

Asynchronous. *lpData* is *NULL*.

RIL SetMsgServiceOptions

HRESULT RIL_SetMsgServiceOptions(HRIL *hRil*, const RILMSGSERVICEINFO* *lpMsgServiceInfo*)

Sets messaging service options

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpMsgServiceInfo
messaging service options to be set
Comments Asynchronous. *lpData* is *NULL*.

RIL SetPhonebookOptions

HRESULT RIL_SetPhonebookOptions(**HRIL** *hRil*, **const RILPHONEBOOKINFO*** *lpPhonebookInfo*)

Sets phonebook options

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpPhonebookInfo

phonebook options to set

Comments

Asynchronous. *lpData* is *NULL*.

RIL SetRequestedQualityOfService

HRESULT RIL_SetRequestedQualityOfService(**HRIL** *hRil*, **const RILGPRSQOSPROFILE*** *lpGprsQosProfile*)

Sets the requested quality of service profile for a context

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpGprsQosProfile

points to a **RILGPRSQOSPROFILE** structure

Comments

Asynchronous. *lpData* is *NULL*.

RIL SetRLPOptions

HRESULT RIL_SetRLPOptions(**HRIL** *hRil*, **const RILRLPINFO*** *lpRlpInfo*)

Sets Radio Link Protocol options

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpRlpInfo

Radio Link Protocol options to set

Comments

Asynchronous. *lpData* is *NULL*.

RIL_SetSimToolkitProfile

HRESULT RIL_SetSimToolkitProfile(**HRIL** *hRil*, **const BYTE*** *lpbProfile*, **DWORD** *dwSize*)

Sets SIM Toolkit terminal profile

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpbProfile

SIM Toolkit profile to be set

dwSize

size of the data pointed to by *lpbProfile* in bytes

Comments

Asynchronous. *lpData* is *NULL*.

RIL_TerminateSimToolkitSession

HRESULT RIL_TerminateSimToolkitSession(**HRIL** *hRil*, **DWORD** *dwCause*)

Terminates the SIM Toolkit session

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

dwCause

cause for session termination (*RIL_SIMTKITTERMCAUSE_* constant)

Comments

Asynchronous. *lpData* is *NULL*.

RIL_TransferCall

HRESULT RIL_TransferCall(**HRIL** *hRil*, **const RILADDRESS*** *lpAddress*, **const RILSUBADDRESS*** *lpSubAddress*)

Transfers incoming alerting call to the specified number

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpAddress

address to transfer the call to

lpSubAddress

sub-address to transfer the call to (can be *NULL*)

Comments

Asynchronous. *lpData* is *NULL*.

RIL UnlockPhone

HRESULT RIL_UnlockPhone(**HRIL** *hRil*, **LPCSTR** *lpzPassword*, **LPCSTR** *lpzNewPassword*)

Removes current lock applied to the phone

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpzPassword

password to unlock the phone (no longer than **MAXLENGTH_PASSWORD** chars)

lpzNewPassword

new password (can be **NULL**, unless the current locked state is one of the **RIL_LOCKEDSTATE_*_PUK** constants; no longer than **MAXLENGTH_PASSWORD** chars)

Comments

Asynchronous. *lpData* is **NULL**.

RIL UnregisterFromNetwork

HRESULT RIL_UnregisterFromNetwork(**HRIL** *hRil*)

Unregisters the ME from the current newtwork operator

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

Comments

Asynchronous. *lpData* is **NULL**.

RIL WriteMsg

HRESULT RIL_WriteMsg(**HRIL** *hRil*, **const RILMESSAGE*** *lpMessage*, **DWORD** *dwStatus*)

Writes a message to the current storage location

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpMessage

message to be written (of type **RIL_MSGTYPE_IN_DELIVER** or **RIL_MSGTYPE_OUT_SUBMIT**)

dwStatus

status to assigned to the written message (**RIL_MSGSTATUS_** constant)

Comments

Asynchronous. *lpData* points to a **DWORD** conaining the index used.

RIL_WritePhonebookEntry

HRESULT RIL_WritePhonebookEntry(**HRIL** *hRil*, **const RILPHONEBOOKENTRY*** *lpEntry*)

Writes a phonebook entry to the current storage location

Parameters

hRil

handle to RIL instance returned by **RIL_Initialize**

lpEntry

phonebook entry to write out

Comments

Asynchronous. *lpData* is *NULL*.

void (CALLBACK *RILNOTIFYCALLBACK)

typedef void (CALLBACK *RILNOTIFYCALLBACK)(**DWORD** *dwCode*, **const void*** *lpData*, **DWORD** *cbData*, **DWORD** *dwParam*)

RIL notification callback

Parameters

dwCode

notification code

lpData

data associated with the notification

cbData

size of the structure pointed to *lpData*

dwParam

parameter passed to **RIL_Initialize**

Comments

This function is called when the radio sends an unsolicited notification

void (CALLBACK *RILRESULTCALLBACK)

typedef void (CALLBACK *RILRESULTCALLBACK)(**DWORD** *dwCode*, **HRESULT** *hrCmdID*, **const void*** *lpData*, **DWORD** *cbData*, **DWORD** *dwParam*)

RIL function result callback

Parameters

dwCode

result code

hrCmdID

ID returned by the command that originated this response

lpData

data associated with the notification

cbData

size of the structure pointed to *lpData*

dwParam
parameter passed to **RIL_Initialize**

Comments This function is called to send a return value after and asynchronous RIL function call

RILADDRESS Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwType;
    DWORD dwNumPlan;
    WCHAR wszAddress[MAXLENGTH_ADDRESS];
} RILADDRESS;
```

Members

Represents a phone number

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwType
type of number

dwNumPlan
numbering plan

wszAddress[MAXLENGTH_ADDRESS]
address (min 3, max 43)

Comments None

RILAUDIODEVICEINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwTxDevice;
    DWORD dwRxDevice;
} RILAUDIODEVICEINFO;
```

Members

Audio device information

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwTxDevice
transmit device

	dwRxDevice receive device
Comments	None

RILBEARERSVCINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwSpeed;
    DWORD dwServiceName;
    DWORD dwConnectionElement;
} RILBEARERSVCINFO;
```

	Bearer service settings
Members	cbSize structure size in bytes
	dwParams indicates valid parameters
	dwSpeed offered data speed (protocol dependant)
	dwServiceName type of data service
	dwConnectionElement indicates transparent or non-transparent connection
Comments	For <i>RIL_BSVCCCE_BOTH_</i> constants, the subsequent text indicates the preferred connection element. For instance, <i>RIL_BSVCCCE_BOTH_TRANSPARENT</i> means that both transparent and non transparent are supported, but transparent is preferred.

RILCALLERIDSETTINGS Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwStatus;
    DWORD dwProvisioning;
} RILCALLERIDSETTINGS;
```

	Caller ID settings
Members	cbSize structure size in bytes
	dwParams indicates valid parameters

dwStatus
activation status

dwProvisioning
network provisioning status

Comments
None

RILCALLFORWARDINGSETTING Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwStatus;
    DWORD dwInfoClasses;
    RILADDRESS raAddress;
    RILSUBADDRESS rsaSubAddress;
    DWORD dwDelayTime;
} RILCALLFORWARDINGSETTING;
```

Members

Call forwarding service settings

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwStatus
activation status

dwInfoClasses
indicates which classes of calls to forward

raAddress
forwarding address

rsaSubAddress
forwarding subaddress

dwDelayTime
seconds to wait in *RIL_FWDREASON_NOREPLY* case

Comments
None

RILCALLHSCSDINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwRxTimeslots;
    DWORD dwTxTimeslots;
    DWORD dwAirInterfaceUserRate;
    DWORD dwChannelCoding;
```

```
} RILCALLHSCSDINFO;
```

High speed circuit switched data information for the current call

Members

cbSize

structure size in bytes

dwParams

indicates valid parameters

dwRxTimeslots

number of receive timeslots currently in use

dwTxTimeslots

number of transmit timeslots currently in use

dwAirInterfaceUserRate

air interface user rate currently in use

dwChannelCoding

current channel coding

Comments

None

RILCALLINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwID;
    DWORD dwDirection;
    DWORD dwStatus;
    DWORD dwType;
    DWORD dwMultiparty;
    RILADDRESS raAddress;
    WCHAR wszDescription[MAXLENGTH_DESCRIPTION];
} RILCALLINFO;
```

Information about a specific call

Members

cbSize

structure size in bytes

dwParams

indicates valid parameters

dwID

identifies each call

dwDirection

incoming or outgoing

dwStatus

properties of the call

dwType

voice or data or fax

	dwMultiparty conference call status
	raAddress call address
	wszDescription [MAXLENGTH_DESCRIPTION] any associated text
Comments	None

RILCALLWAITINGINFO Structure

	<pre>typedef struct { DWORD cbSize; DWORD dwParams; DWORD dwCallType; DWORD dwAddressId; RILREMOTEPARTYINFO rrpCallerInfo; } RILCALLWAITINGINFO;</pre>
	Call waiting info
Members	cbSize structure size in bytes
	dwParams indicates valid parameters
	dwCallType type of call
	dwAddressId indicates address ID on which the incoming call arrived (if available)
	rrpCallerInfo caller information
Comments	None

RILCAPSBARRINGPWDLENGTH Structure

	<pre>typedef struct { DWORD cbSize; DWORD dwParams; DWORD dwType; DWORD dwPasswordLength; } RILCAPSBARRINGPWDLENGTH;</pre>
	Call barring password length capabilities
Members	cbSize structure size in bytes

indicates valid parameters

dwType

type of call barring

dwPasswordLength

maximum password length (TBD BUGBUG, should this be a range?)

Comments

None

RILCAPSBEARERSVC Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwSpeeds1;
    DWORD dwSpeeds2;
    DWORD dwServiceNames;
    DWORD dwConnectionElements;
} RILCAPSBEARERSVC;
```

Bearer service capabilities

cbSize

structure size in bytes

dwParams

indicates valid parameters

dwSpeeds1

TBD

dwSpeeds2

TBD

dwServiceNames

TBD

dwConnectionElements

TBD

Members

Comments

None

RILCAPSDIAL Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwCallTypes;
    DWORD dwOptions;
} RILCAPSDIAL;
```

Dialing capabilities

Members	cbSize
	structure size in bytes
	dwParams
	indicates valid parameters
	dwCallTypes
	type of call being placed
	dwOptions
	dialing options
Comments	None

RILCAPSHSCSD Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwMultislotClass;
    DWORD dwMaxRxTimeslots;
    DWORD dwMaxTxTimeslots;
    DWORD dwMaxTotalTimeslots;
    DWORD dwChannelCodings;
    DWORD dwAirInterfaceUserRates;
    RILRANGE rrTopRxTimeslotRange;
} RILCAPSHSCSD;
```

Members	High Speed Circuit Switched Data capabilities
	cbSize
	structure size in bytes
	dwParams
	indicates valid parameters
	dwMultislotClass
	multislot class supported
	dwMaxRxTimeslots
	maximum number of receive timeslots
	dwMaxTxTimeslots
	maximum number of transmit timeslots
	dwMaxTotalTimeslots
	maximum number of total timeslots
	dwChannelCodings
	supported channel codings
	dwAirInterfaceUserRates
	supported air interfacerates
	rrTopRxTimeslotRange
	TBD
Comments	None

RILCAPSLOCKINGPWDLENGTH Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwFacility;
    DWORD dwPasswordLength;
} RILCAPSLOCKINGPWDLENGTH;
```

Members

Locking password length capabilities

cbSize

structure size in bytes

dwParams

indicates valid parameters

dwFacility

the locking facility

dwPasswordLength

maximum password length (TBD BUGBUG, should this be a range?)

Comments

None

RILCAPSMMSGMEMORYLOCATIONS Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwReadLocations;
    DWORD dwWriteLocations;
    DWORD dwStoreLocations;
} RILCAPSMMSGMEMORYLOCATIONS;
```

Members

Message memory location capabilities

cbSize

structure size in bytes

dwParams

indicates valid parameters

dwReadLocations

supported read locations

dwWriteLocations

supported write locations

dwStoreLocations

supported store locations

Comments

None

RILCAPSRLP Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwVersion;
    RILRANGE rrIWSRange;
    RILRANGE rrMWSRange;
    RILRANGE rrAckTimerRange;
    RILRANGE rrRetransmissionAttsRange;
    RILRANGE rrReseqPeriodRange;
} RILCAPSRLP;
```

Members

Radio Link Protocol capabilities

cbSize

structure size in bytes

dwParams

indicates valid parameters

dwVersion

TBD

rrIWSRange

TBD

rrMWSRange

TBD

rrAckTimerRange

TBD

rrRetransmissionAttsRange

TBD

rrReseqPeriodRange

TBD

Comments

None

RILCELLTOWERINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwMobileCountryCode;
    DWORD dwMobileNetworkCode;
    DWORD dwLocationAreaCode;
    DWORD dwCellID;
    DWORD dwBaseStationID;
    DWORD dwBroadcastControlChannel;
    DWORD dwRxLevel;
    DWORD dwRxLevelFull;
```

```

        DWORD dwRxLevelSub;
        DWORD dwRxQuality;
        DWORD dwRxQualityFull;
        DWORD dwRxQualitySub;
        DWORD dwIdleTimeSlot;
        DWORD dwTimingAdvance;
        DWORD dwGPRSCellID;
        DWORD dwGPRSBaseStationID;
    } RILCELLTOWERINFO;

```

Members

Cell tower info

cbSize

structure size in bytes

dwParams

indicates valid parameters

dwMobileCountryCode

TBD

dwMobileNetworkCode

TBD

dwLocationAreaCode

TBD

dwCellID

TBD

dwBaseStationID

TBD

dwBroadcastControlChannel

TBD

dwRxLevel

Value from 0-63 (see GSM 05.08, 8.1.4)

dwRxLevelFull

Value from 0-63 (see GSM 05.08, 8.1.4)

dwRxLevelSub

Value from 0-63 (see GSM 05.08, 8.1.4)

dwRxQuality

Value from 0-7 (see GSM 05.08, 8.2.4)

dwRxQualityFull

Value from 0-7 (see GSM 05.08, 8.2.4)

dwRxQualitySub

Value from 0-7 (see GSM 05.08, 8.2.4)

dwIdleTimeSlot

TBD

dwTimingAdvance

TBD

dwGPRSCellID

TBD

dwGPRSBaseStationID
TBD

Comments None

RILCLOSEDGROUPSETTINGS Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwStatus;
    DWORD dwIndex;
    DWORD dwInfo;
} RILCLOSEDGROUPSETTINGS;
```

Members

Close user group settings

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwStatus
activation status

dwIndex
CUG index

dwInfo
additional CUG flags

Comments This feature is not used in Stinger and is untested.

RILCONNECTINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwCallType;
    DWORD dwBaudRate;
} RILCONNECTINFO;
```

Members

Connection info

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwCallType
type of the established connection (*RIL_CALLTYPE_* constant)

dwBaudRate
Baud rate of the established connection (set only for *RIL_CALLTYPE_DATA*)

Comments None

RILCOSTINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwCCM;
    DWORD dwACM;
    DWORD dwMaxACM;
    DWORD dwCostPerUnit;
    WCHAR wszCurrency[MAXLENGTH_CURRENCY];
} RILCOSTINFO;
```

Members

Service cost info

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwCCM
current call meter

dwACM
accumulated call meter

dwMaxACM
maximum accumulated call meter

dwCostPerUnit
cost per unit, in 16.16 fixed point

wszCurrency[MAXLENGTH_CURRENCY]
current currency

Comments None

RILDATACOMPINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwDirection;
    DWORD dwNegotiation;
    DWORD dwMaxDictEntries;
    DWORD dwMaxStringLength;
} RILDATACOMPINFO;
```

Members	Data compression settings
	cbSize structure size in bytes
	dwParams indicates valid parameters
	dwDirection compression in transmit and/or receive direcitons
	dwNegotiation compression is required or optional
	dwMaxDictEntries maximum number of dictionary entries
	dwMaxStringLength maximum string length
Comments	None

RILDIALEDIDSETTINGS Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwStatus;
    DWORD dwProvisioning;
} RILDIALEDIDSETTINGS;
```

Members	Dialed ID settings
	cbSize structure size in bytes
	dwParams indicates valid parameters
	dwStatus activation status
	dwProvisioning network provisioning status
Comments	None

RILDIALINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    HRESULT hrCmdId;
    DWORD dwCallId;
} RILDIALINFO;
```

Members	Ring information
	cbSize structure size in bytes
	dwParams indicates valid parameters
	hrCmdId handle of call being dialed
	dwCallId id of call being dialed
Comments	None

RILENTERGPRSDATAMODE Structure

```
typedef struct {
    DWORD cbSize;
} RILENTERGPRSDATAMODE;
```

Members	A quality of service profile
	cbSize structure size in bytes
Comments	None Disable "C4200: nonstandard extension used : zero-sized array in struct/union"
Parameters	<i>dwL2Protocol</i> an optional RILL2PROTOCOL_* constant
	<i>dwNumContexts</i> number of contexts which follow
	<i>dwContextID[]</i> identifies the context(s) to enter data state

RILEQUIPMENTINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    char szManufacturer[MAXLENGTH_EQUIPINFO];
    char szModel[MAXLENGTH_EQUIPINFO];
    char szRevision[MAXLENGTH_EQUIPINFO];
    char szSerialNumber[MAXLENGTH_EQUIPINFO];
} RILEQUIPMENTINFO;
```

Members	Equipment info
	cbSize structure size in bytes

05700347-0E4E04

dwParams
indicates valid parameters

szManufacturer[MAXLENGTH_EQUIPINFO]
manufacturer of the radio hardware

szModel[MAXLENGTH_EQUIPINFO]
model of the radio hardware

szRevision[MAXLENGTH_EQUIPINFO]
software version of the radio stack

szSerialNumber[MAXLENGTH_EQUIPINFO]
equipment identity (IMEI)

Comments None

RILEQUIPMENTSTATE Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    DWORD dwRadioSupport;  
    DWORD dwEqState;  
} RILEQUIPMENTSTATE;
```

Equipment state

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwRadioSupport
RIL_RADIOSUPPORT_* Parameter

dwEqState
RIL_EQSTATE_* Parameter

Members

Comments None

RILERRORCORRECTIONINFO Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    DWORD dwOriginalRequest;  
    DWORD dwOriginalFallback;  
    DWORD dwAnswererFallback;  
} RILERRORCORRECTIONINFO;
```

Error correction settings

Members	cbSize
	structure size in bytes
	dwParams
	indicates valid parameters
	dwOriginalRequest
	TBD
	dwOriginalFallback
	TBD
	dwAnswererFallback
	TBD
Comments	None

RILGAININFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwTxGain;
    DWORD dwRxGain;
} RILGAININFO;
```

Members	Audio gain information
	cbSize
	structure size in bytes
	dwParams
	indicates valid parameters
	dwTxGain
	transmit gain level (128 nominal, 0 automatic)
	dwRxGain
	receive gain level (128 nominal, 0 automatic)
Comments	None

RILGPRSANSWER Structure

```
typedef struct {
    DWORD cbSize;
} RILGPRSANSWER;
```

Members	A quality of service profile
	cbSize
	structure size in bytes
Comments	None
	Disable "C4200: nonstandard extension used : zero-sized array in struct/union"

Parameters

fAnswer

TRUE: accept, FALSE: reject

dwL2Protocol

an optional RILL2PROTOCOL_* constant

dwNumContexts

number of contexts which follow

dwContextID[]

identifies the context(s) to enter data state

RILGPRSCONTEXT Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwContextID;
    DWORD dwProtocolType;
    RILGPRSCONTEXT;
    WCHAR wszAddress[MAXLENGTH_GPRSADDRESS];
    DWORD dwDataCompression;
    DWORD dwHeaderCompression;
    DWORD dwParameterLength;
    char szParameters[];
} RILGPRSCONTEXT;
```

A PDP Context represents a certain configuration for packet data communication.

Members

cbSize

structure size in bytes

dwParams

indicates valid parameters

dwContextID

the context number

dwProtocolType

a RIL_GPRSPROTOCOL_* constant

RILGPRSCONTEXT

a logical name to select the gateway gprs (which defines the external packet data network to use)

wszAddress[MAXLENGTH_GPRSADDRESS]

the packet address to use (if null, request dynamic)

dwDataCompression

a RIL_GPRSDATACOMP_*

dwHeaderCompression

a RIL_GPRSHADERCOMP_*

dwParameterLength

length of parameters list

	szParameters[] parameters specific to the protocol type
Comments	None Disable "C4200: nonstandard extension used : zero-sized array in struct/union"

RILGPRSCONTEXTACTIVATED Structure

	<pre>typedef struct { DWORD cbSize; DWORD dwContextID; BOOL fActivated; } RILGPRSCONTEXTACTIVATED;</pre>
Members	<p>Shows which contexts are active</p> <p>cbSize structure size in bytes</p> <p>dwContextID the context number</p> <p>fActivated whether the context is activated</p>
Comments	None

RILGPRSPROTOCOLCAPS Structure

	<pre>typedef struct { DWORD cbSize; DWORD dwParams; DWORD dwProtocolType; DWORD dwPrecedenceClass; DWORD dwDelayClass; DWORD dwReliabilityClass; DWORD dwPeakThruClass; DWORD dwMeanThruClass; } RILGPRSPROTOCOLCAPS;</pre>
Members	<p>General Packet Radio Service capabilities</p> <p>cbSize structure size in bytes (padded to DWORD)</p> <p>dwParams indicates valid parameters</p> <p>dwProtocolType a RIL_GPRSPROTOCOL_* constant</p> <p>dwPrecedenceClass valid RIL_GPRSPRECEDENCECLASS_* constants</p>

	dwDelayClass valid RIL_GPRSDELAYCLASS_* constants
	dwReliabilityClass valid RIL_GPRSRELIABILITYCLASS_* constants
	dwPeakThruClass valid RIL_GPRSPeakThruClass_* constants
	dwMeanThruClass valid RIL_GPRSMeanThruClass_* constants
Comments	TBDTBD Disable "C4200: nonstandard extension used : zero-sized array in struct/union"

RILGPRSPROTOCOLCAPS Structure

	<pre>typedef struct { DWORD cbSize; DWORD dwParams; DWORD dwProtocolType; RILRANGE ContextIDRange; DWORD dwDataCompression; DWORD dwHeaderCompression; DWORD dwParameterLength; char szParameters[]; } RILGPRSPROTOCOLCAPS;</pre>
Members	<p>General Packet Radio Service capabilities</p> <p>cbSize structure size in bytes (padded to DWORD)</p> <p>dwParams indicates valid parameters</p> <p>dwProtocolType a RIL_GPRSPROTOCOL_* constant</p> <p>ContextIDRange min/max context ids</p> <p>dwDataCompression valid data compression values</p> <p>dwHeaderCompression valid header compression values</p> <p>dwParameterLength length of parameters list in bytes</p> <p>szParameters[] valid string parameters of this protocol type, delimited by , with final param terminated by</p>
Comments	TBDTBD Disable "C4200: nonstandard extension used : zero-sized array in struct/union"

RILGPRSQOSPROFILE Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwContextID;
    DWORD dwPrecedenceClass;
    DWORD dwDelayClass;
    DWORD dwReliabilityClass;
    DWORD dwPeakThruClass;
    DWORD dwMeanThruClass;
} RILGPRSQOSPROFILE;
```

Members

A quality of service profile

cbSize

structure size in bytes

dwParams

indicates valid parameters

dwContextID

the context number

dwPrecedenceClass

a RIL_GPRSPRECEDENCECLASS_* constant

dwDelayClass

a RIL_GPRSDELAYCLASS_* constant

dwReliabilityClass

a RIL_GPRSRELIABILITYCLASS_* constant

dwPeakThruClass

a RIL_GPRSPPEAKTHRUCLASS_* constant

dwMeanThruClass

a RIL_GPRSMEANTHRUCLASS_* constant

Comments

None

RILHIDECONNECTEDIDSETTINGS Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwStatus;
    DWORD dwProvisioning;
} RILHIDECONNECTEDIDSETTINGS;
```

Members

Hide Connected ID settings

cbSize

structure size in bytes

0578037 001604

dwParams
indicates valid parameters

dwStatus
activation status

dwProvisioning
network provisioning status

Comments None

RILHIDEIDSETTINGS Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    DWORD dwStatus;  
    DWORD dwProvisioning;  
} RILHIDEIDSETTINGS;
```

Members

Hide ID settings

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwStatus
activation status

dwProvisioning
network provisioning status

Comments None

RILHSCSDINFO Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    DWORD dwTranspRxTimeslots;  
    DWORD dwTranspChannelCodings;  
    DWORD dwNonTranspRxTimeslots;  
    DWORD dwNonTranspChannelCodings;  
    DWORD dwAirInterfaceUserRate;  
    DWORD dwRxTimeslotsLimit;  
    BOOL fAutoSvcLevelUpgrading;  
} RILHSCSDINFO;
```

High speed circuit switched data settings

Members

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwTranspRxTimeslots
number of receive timeslots for transparent HSCSD calls

dwTranspChannelCodings
accepted channel codings for transparent HSCSD calls

dwNonTranspRxTimeslots
number of receive timeslots for non-transparent HSCSD calls

dwNonTranspChannelCodings
accepted channel codings for non-transparent HSCSD calls

dwAirInterfaceUserRate
air interface user rate for non-transparent HSCSD calls

dwRxTimeslotsLimit
maximum number of receive timeslots to be used during the next non-transparent HSCSD call

fAutoSvcLevelUpgrading
TRUE if automatic user-initiated service level upgrading for non-transparent HSCSD calls is enabled, FALSE otherwise

Comments

None

RILMESSAGE Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    RILADDRESS raSvcCtrAddress;  
    DWORD dwType;  
    DWORD dwFlags;  
    union {  
        struct {  
            RILADDRESS raOrigAddress;  
            DWORD dwProtocolID;  
            RILMSGDCS rmdDataCoding;  
            SYSTEMTIME stSCReceiveTime;  
            DWORD cbHdrLength;  
            DWORD cchMsgLength;  
            BYTE rgbHdr[MAXLENGTH_HDR];  
            BYTE rgbMsg[MAXLENGTH_MSG];  
            msgInDeliver;  
            struct {  
                DWORD dwTgtMsgReference;  
                RILADDRESS raTgtRecipAddress;  
                SYSTEMTIME stTgtSCReceiveTime;  
                SYSTEMTIME stTgtDischargeTime;
```



```

    DWORD dwTgtDlvStatus;
    DWORD dwProtocolID;
    RILMSGDCS rmdDataCoding;
    DWORD cbHdrLength;
    DWORD cchMsgLength;
    BYTE rgbHdr[MAXLENGTH_HDR];
    BYTE rgbMsg[MAXLENGTH_MSG];
    msgInStatus;
    struct {
        RILADDRESS raDestAddress;
        DWORD dwProtocolID;
        RILMSGDCS rmdDataCoding;
        DWORD dwVPFormat;
        SYSTEMTIME stVP;
        DWORD cbHdrLength;
        DWORD cchMsgLength;
        BYTE rgbHdr[MAXLENGTH_HDR];
        BYTE rgbMsg[MAXLENGTH_MSG];
        msgOutSubmit;
        struct {
            DWORD dwProtocolID;
            DWORD dwCommandType;
            DWORD dwTgtMsgReference;
            RILADDRESS raDestAddress;
            DWORD cbCmdLength;
            BYTE rgbCmd[MAXLENGTH_CMD];
            msgOutCommand;
            struct {
                DWORD dwGeoScope;
                DWORD dwMsgCode;
                DWORD dwUpdateNumber;
                DWORD dwID;
                RILMSGDCS rmdDataCoding;
                DWORD dwTotalPages;
                DWORD dwPageNumber;
                DWORD cchMsgLength;
                BYTE rgbMsg[MAXLENGTH_MSG];
                msgBcGeneral;
                DWORD cchMsgLength;
                BYTE rgbMsg[MAXLENGTH_MSG];
                msgOutRaw;
            };
        };
    };
} RILMESSAGE;

```

Members

Message data

cbSize

structure size in bytes

dwParams

indicates valid parameters

raSvcCtrAddress

service center address

dwType
type of message

dwFlags
message flags

UNION MEMBER

RIL_MSGTYPE_IN_DELIVER

raOrigAddress
originating address

dwProtocolID
message protocol

rmdDataCoding
data coding scheme

stSCReceiveTime
receive time

cbHdrLength
length of header in bytes

cchMsgLength
length of body in bytes

rgbHdr[MAXLENGTH_HDR]
header buffer

rgbMsg[MAXLENGTH_MSG]
body buffer

msgInDeliver
End RIL_MSGTYPE_IN_DELIVER

RIL_MSGTYPE_IN_STATUS

dwTgtMsgReference
target message reference

raTgtRecipAddress
recipient address

stTgtSCReceiveTime
recipient receive time

stTgtDischargeTime
recipient discharge time

dwTgtDlvStatus
delivery status

dwProtocolID
message protocol

rmdDataCoding
data coding scheme

cbHdrLength
length of header in bytes

cchMsgLength
length of body in bytes

rgbHdr[MAXLENGTH_HDR]
header buffer

rgbMsg[MAXLENGTH_MSG]
body buffer

msgInStatus
End RIL_MSGTYPE_IN_STATUS

RIL_MSGTYPE_OUT_SUBMIT

raDestAddress
destination address

dwProtocolID
message protocol

rmdDataCoding
data coding scheme

dwVPFormat
TBD

stVP
TBD

cbHdrLength
length of header in bytes

cchMsgLength
length of body in bytes

rgbHdr[MAXLENGTH_HDR]
header buffer

rgbMsg[MAXLENGTH_MSG]
body buffer

msgOutSubmit
RIL_MSGTYPE_OUT_SUBMIT

RIL_MSGTYPE_OUT_COMMAND

dwProtocolID
message protocol

dwCommandType
command type

dwTgtMsgReference
target message reference

raDestAddress
destination address

cbCmdLength
length of command in bytes

rgbCmd[MAXLENGTH_CMD]
command buffer

msgOutCommand
RIL_MSGTYPE_OUT_COMMAND

RIL_MSGTYPE_BC_GENERAL

dwGeoScope
message protocol

dwMsgCode
message code

dwUpdateNumber
update number

dwID
identity

rmdDataCoding
data coding scheme

dwTotalPages
total number of pages

dwPageNumber
current page number

cchMsgLength
length of message in bytes

rgbMsg[MAXLENGTH_MSG]
message buffer

msgBcGeneral
RIL_MSGTYPE_BC_GENERAL

cchMsgLength
length of body in bytes

rgbMsg[MAXLENGTH_MSG]
message buffer

msgOutRaw
RIL_MSGTYPE_OUT_RAW

Comments None

RILMESSAGE IN SIM Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwLocation;
    DWORD dwIndex;
```

```
} RILMESSAGE_IN_SIM;
```

Members

Message data in sim info

cbSize
structure size in bytes

dwLocation
storage area (one of RIL_MSGLOC_xxxx)

dwIndex
storage index occupied by the message

Comments

None

RILMESSAGEINFO Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    DWORD dwIndex;  
    DWORD dwStatus;  
    RILMESSAGE rmMessage;  
} RILMESSAGEINFO;
```

Members

Message data with additional info

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwIndex
storage index occupied by the message

dwStatus
message status

rmMessage
the message itself

Comments

None

RILMSGCONFIG Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    RILADDRESS raSvcCtrAddress;  
    char szBroadcastMsgIDs[MAXLENGTH_MSGIDS];  
    DWORD dwBroadcastMsgLangs;  
} RILMSGCONFIG;
```

Members	Messaging configuration
	cbSize structure size in bytes
	dwParams indicates valid parameters
	raSvcCtrAddress service center address
	szBroadcastMsgIDs[MAXLENGTH_MSGIDS] list of subscribed broadcast message IDs
	dwBroadcastMsgLangs broadcast message languages
Comments	None

RILMSGDCS Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwType;
    DWORD dwFlags;
    DWORD dwMsgClass;
    DWORD dwAlphabet;
    DWORD dwIndication;
    DWORD dwLanguage;
} RILMSGDCS;
```

Members	Message data coding scheme
	cbSize structure size in bytes
	dwParams indicates valid parameters
	dwType DCS type
	dwFlags DCS flags
	dwMsgClass message class (Only for RIL_DCSTYPE_GENERAL and RIL_DCSTYPE_MSGCLASS)
	dwAlphabet DCS alphabet
	dwIndication indication (Only for RIL_DCSTYPE_MSGWAIT)
	dwLanguage indication (Only for RIL_DCSTYPE_LANGUAGE)

RILMSGSERVICEINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwService;
    DWORD dwMsgClasses;
    DWORD dwReadLocation;
    DWORD dwReadUsed;
    DWORD dwReadTotal;
    DWORD dwWriteLocation;
    DWORD dwWriteUsed;
    DWORD dwWriteTotal;
    DWORD dwStoreLocation;
    DWORD dwStoreUsed;
    DWORD dwStoreTotal;
} RILMSGSERVICEINFO;
```

Members

Messaging service settings

cbSize

structure size in bytes

dwParams

indicates valid parameters

dwService

supported service types

dwMsgClasses

supported message classes

dwReadLocation

current read location

dwReadUsed

number of fields used

dwReadTotal

total number of fields

dwWriteLocation

current read location

dwWriteUsed

number of fields used

dwWriteTotal

total number of fields

dwStoreLocation

current read location

dwStoreUsed

number of fields used

05766317-0E1604

dwStoreTotal
total number of fields

Comments None

RILMSGSTORAGEINFO Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    DWORD dwReadLocation;  
    DWORD dwWriteLocation;  
    DWORD dwStoreLocation;  
} RILMSGSTORAGEINFO;
```

Members

Message storage locations

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwReadLocation
current read location

dwWriteLocation
current write location

dwStoreLocation
current store location

Comments None

RILOPERATORINFO Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    DWORD dwIndex;  
    DWORD dwStatus;  
    RILOPERATORNAMES ronNames;  
} RILOPERATORINFO;
```

Members

Indicates status of a particular operator

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwIndex
index, if applicable

dwStatus
registration status, if applicable

ronNames
representations of an operator

Comments None

RILOPERATORNAMES Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    char szLongName[MAXLENGTH_OPERATOR_LONG];
    char szShortName[MAXLENGTH_OPERATOR_SHORT];
    char szNumName[MAXLENGTH_OPERATOR_NUMERIC];
} RILOPERATORNAMES;
```

The different representations of an operator

Members

cbSize
structure size in bytes

dwParams
indicates valid parameters

szLongName[MAXLENGTH_OPERATOR_LONG]
long representation (max 16 characters)

szShortName[MAXLENGTH_OPERATOR_SHORT]
short representation (max 8 characters)

szNumName[MAXLENGTH_OPERATOR_NUMERIC]
numeric representation (3 digit country code & 2 digit network code)

Comments None

RILPHONEBOOKENTRY Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwIndex;
    RILADDRESS raAddress;
    WCHAR wszText[MAXLENGTH_PHONEBOOKTEXT];
} RILPHONEBOOKENTRY;
```

A single phonebook entry

Members

cbSize
structure size in bytes

dwParams
indicates valid parameters

	dwIndex index of the entry
	raAddress the stored address
	wszText [MAXLENGTH_PHONEBOOKTEXT] assciated text
Comments	None

RILPHONEBOOKINFO Structure

	<pre>typedef struct { DWORD cbSize; DWORD dwParams; DWORD dwStoreLocation; DWORD dwUsed; DWORD dwTotal; } RILPHONEBOOKINFO;</pre>
	Phonebook settings
Members	cbSize structure size in bytes
	dwParams indicates valid parameters
	dwStoreLocation location of phonebook memory
	dwUsed number of locations used
	dwTotal total number of phonebook locations
Comments	None

RILRANGE Structure

	<pre>typedef struct { DWORD dwMinValue; DWORD dwMaxValue; } RILRANGE;</pre>
	Range of values
Members	dwMinValue minimum value
	dwMaxValue maximum value

Comments None

RILREMOTEPARTYINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    RILADDRESS raAddress;
    RILSUBADDRESS rsaSubAddress;
    WCHAR wszDescription[MAXLENGTH_DESCRIPTION];
    DWORD dwValidity;
} RILREMOTEPARTYINFO;
```

Members

Incoming call info

cbSize
structure size in bytes

dwParams
indicates valid parameters

raAddress
address of caller

rsaSubAddress
subaddress of caller

wszDescription[MAXLENGTH_DESCRIPTION]
text associated with caller

dwValidity
indicates validity of caller info

Comments None

RILRINGINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwCallType;
    DWORD dwAddressId;
    RILSERVICEINFO rsiServiceInfo;
} RILRINGINFO;
```

Members

Ring information

cbSize
structure size in bytes

dwParams
indicates valid parameters

05768317-024604
T09T237-024604

dwCallType
type of the offered call (*RIL_CALLTYPE_* constant)

dwAddressId
indicates address ID on which the incoming call arrived (if available)

rsiServiceInfo
data connection service information (set only for *RIL_CALLTYPE_DATA*)

Comments None

RILRLPINFO Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    DWORD dwIWS;  
    DWORD dwMWS;  
    DWORD dwAckTimer;  
    DWORD dwRetransmissionAttempts;  
    DWORD dwVersion;  
    DWORD dwResequencingPeriod;  
} RILRLPINFO;
```

Members

Radio link protocol settings

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwIWS
IWF-to-MS window size

dwMWS
MS-to-IWF window size

dwAckTimer
acknowledgement timer in 10s of milliseconds (T1)

dwRetransmissionAttempts
number of retransmission attempts (N2)

dwVersion
RLP version number

dwResequencingPeriod
resequencing period (T4)

Comments None

RILSERIALPORTSTATS Structure

```
typedef struct {
```

```
    DWORD cbSize;  
    DWORD dwParams;  
    DWORD dwReadBitsPerSecond;  
    DWORD dwWrittenBitsPerSecond;  
} RILSERIALPORTSTATS;
```

Members	Statistics of the virtual serial port
	cbSize structure size in bytes
	dwParams indicates valid parameters
	dwReadBitsPerSecond bit rate for reading data
	dwWrittenBitsPerSecond bit rate for writing data
Comments	None

RILSERVICEINFO Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    BOOL fSynchronous;  
    BOOL fTransparent;  
} RILSERVICEINFO;
```

Members	Connection service information
	cbSize structure size in bytes
	dwParams indicates valid parameters
	fSynchronous TRUE if connection service is synchronous, FALSE if asynchronous
	fTransparent TRUE if connection service is transparent, FALSE if non-transparent
Comments	None

RILSIGNALQUALITY Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    int nSignalStrength;  
    int nMinSignalStrength;
```

```

    int nMaxSignalStrength;
    DWORD dwBitErrorRate;
    int nLowSignalStrength;
    int nHighSignalStrength;
} RILSIGNALQUALITY;

```

Members

Signal quality info

cbSize
structure size in bytes

dwParams
indicates valid parameters

nSignalStrength
TBD

nMinSignalStrength
TBD

nMaxSignalStrength
TBD

dwBitErrorRate
bit error rate in 1/100 of a percent

nLowSignalStrength
TBD

nHighSignalStrength
TBD

Comments

None

RILSIMCMDPARAMETERS Structure

```

typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwFileID;
    DWORD dwParameter1;
    DWORD dwParameter2;
    DWORD dwParameter3;
} RILSIMCMDPARAMETERS;

```

Members

Parameters for a restricted SIM command

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwFileID
SIM file ID

dwParameter1
parameter specific to SIM command

dwParameter2
parameter specific to SIM command

dwParameter3
parameter specific to SIM command

Comments None

RILSIMRECORDSTATUS Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwRecordType;
    DWORD dwItemCount;
    DWORD dwSize;
} RILSIMRECORDSTATUS;
```

Members Response to a restrcited SIM command

cbSize
Size of the structure in bytes

dwParams
Indicates valid parameter values

dwRecordType
RIL_SIMRECORDTYPE_* Constant

dwItemCount
Number of items in the record

dwSize
Size in bytes of each item

Comments None

RILSIMRESPONSE Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwStatusWord1;
    DWORD dwStatusWord2;
    BYTE pbResponse[];
} RILSIMRESPONSE;
```

Members Response to a restrcited SIM command

cbSize
structure size in bytes

dwParams
indicates valid parameters

	dwStatusWord1	return parameter specific to SIM command
	dwStatusWord2	return parameter specific to SIM command
	pbResponse[]	additional bytes of response data
Comments	None	Disable "C4200: nonstandard extension used : zero-sized array in struct/union"

RILSIMTOOLKITNOTIFYCAPS Structure

	<pre>typedef struct { DWORD cbSize; DWORD dwParams; } RILSIMTOOLKITNOTIFYCAPS;</pre>	
	SIM TOOLKIT NOTIFY CAPABILITIES	
Members	cbSize	structure size in bytes
	dwParams	indicates valid parameters
Comments	This structure indicates who implements the various SIM ToolKit Notifications	
Values	dwRefresh	<i>TBD</i>
	dwMoreTime	<i>TBD</i>
	dwPollInterval	<i>TBD</i>
	dwPollingOff	<i>TBD</i>
	dwSetUpCall	<i>TBD</i>
	dwSendSS	<i>TBD</i>
	dwSendSMS	<i>TBD</i>
	dwPlayTone	<i>TBD</i>
	dwDisplayText	<i>TBD</i>
	dwGetInkey	<i>TBD</i>

dwGetInput

TBD

dwSelectItem

TBD

dwSetupMenu

TBD

dwLocalInfo

TBD

RILSUBADDRESS Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    DWORD dwType;
    WCHAR wszSubAddress[MAXLENGTH_SUBADDR];
} RILSUBADDRESS;
```

Members

The subaddress of a called party

cbSize

structure size in bytes

dwParams

indicates valid parameters

dwType

type of subaddress

wszSubAddress[MAXLENGTH_SUBADDR]

subaddress (min 2, max 23)

Comments

None

RILSUBSCRIBERINFO Structure

```
typedef struct {
    DWORD cbSize;
    DWORD dwParams;
    RILADDRESS raAddress;
    WCHAR wszDescription[MAXLENGTH_DESCRIPTION];
    DWORD dwSpeed;
    DWORD dwService;
    DWORD dwITC;
    DWORD dwAddressId;
} RILSUBSCRIBERINFO;
```

A phone number assigned to the user

Members

cbSize
structure size in bytes

dwParams
indicates valid parameters

raAddress
the assigned address

wszDescription[MAXLENGTH_DESCRIPTION]
text relating to this subscriber

dwSpeed
data rate related to this number

dwService
the service related to this number

dwITC
information transfer capability

dwAddressId
the address ID of this number

Comments

None

RILSUPSERVICEDATA Structure

```
typedef struct {  
    DWORD cbSize;  
    DWORD dwParams;  
    DWORD dwStatus;  
    BYTE pbData[];  
} RILSUPSERVICEDATA;
```

Members

Supplementary service data

cbSize
structure size in bytes

dwParams
indicates valid parameters

dwStatus
additional status for message

pbData[]
message itself

Comments

None

Disable "C4200: nonstandard extension used : zero-sized array in struct/union"